QUARTERLY RETURN

OF THE

Health & Mortality in 117 Districts of England,

For the Quarter ending March 31st, 1847.

ANNUAL SERIES VI.] PUBLISHED BY AUTHORITY OF THE REGISTRAR GENERAL. [1847.—No. 1.

STATE OF THE PUBLIC HEALTH IN THE FIRST QUARTER OF THE YEAR 1847.

"The Quarterly Returns are obtained from 117 Districts, sub-divided into 582 Sub-Districts. *Thirty-six* Districts are in the Metropolis, and the remaining 81 comprise, with some agricultural Districts, the principal towns and cities of England. The population was 6,612,800 in 1841."

Winter appears to be the season in which it is most natural to man to die. For many years the number of deaths in England has been highest in the winter and lowest in the summer quarter. In the summer quarter of 1846 the reverse was observed; the mortality was greater than it had been in any quarter of the seven preceding years; and in the last winter quarter ending March 31, 1847, *fifty-six thousand one hundred and five* persons died in the districts which make the returns; a number greater than has been registered in any corresponding quarter, and *six thousand and thirty-five* above the corrected average. The deaths in the quarter in all England and Wales may be estimated at *120,000.

The annexed Table shews that the mortality was considerably above the average in the winter quarters (ending March 31st) of 1840, 1841, 1845 and 1847,—and much below the average in the winter quarters of 1839, 1842, 1843, 1844 and 1846.

	1839	1840	1841	1842	1843	1844	1845	1846	1847
Deaths registered in the March Quarters of 9 years	42,410	46,376	46,967	44,903	43,748	46,136	49,949	43,850	56,105
Deaths which would have been registered if the mortality had been uniform, and the Numbers had increased from 1839 at the rate of 1·75 per cent. annually	43,581	44,344	45,120	45,910	46,713	47,531	48,362	49,209	50,070
UNHEALTHY SEASONS Difference above the calculated number	..	2,032	1,847	..	..	..	1,587	..	6,035
HEALTHY SEASONS Difference below the calculated number	1,171	..	..	1,007	2,965	1,395	..	5,359	..

The temperature was below the average, and the severity of the weather was one cause of the increased mortality. It is, however, worthy of remark, that at Greenwich the temperature was lower in the winter quarter of 1845 when the deaths returned were 49,949, than in the past quarter of 1847, when the deaths were 56,105. An interesting account of the meteorology of the quarter will be found in page 26 drawn up with great care by Mr. Glaisher, from returns for which I have to thank several gentlemen in the country.

The Registrars in their notes ascribe the increased mortality generally to inflammations of the lungs and air tubes, to typhus, and other diseases, and the effects of cold on the aged. The high price of provisions is also mentioned.

The Registrar of the *Abbey* sub-district, *Bath*, says :—

"The price of provisions has, during the quarter, been about a third above the average, and there has been a want of employment."

The Registrar of *St. James, Bristol* :—

"The increase of deaths, on the corresponding quarter of last year, must be attributed principally to the severity of the weather during the early part of this quarter. There has been no epidemic disease in the district. The children of the poor have suffered much, and mortality has prevailed amongst them, in consequence of many of the men,—who are very generally masons' labourers, being unemployed in the winter season, when their families become destitute, and the younger children deprived of proper clothing and support, are more exposed to inflammatory complaints, particularly of the chest.

In *Lincoln, north-east*—it is said, on the other hand, "work has been abundant in this district, and wages

* The yearly deaths in the districts from which the Quarterly Table is framed, comprise 47.11 per cent. of the deaths in all England and Wales; the proportions in the March quarter are 46.49; in the June, 45.74; in the September, 48.21; and in the December, 48.16 per cent.

tolerably good." The "scarcity and dearness of provisions," and the "imperfect protection which the dwellings and clothing of the poor afford from cold," are referred to by the Registrars of *Bulwell* and *Greasley*, *Basford*; the "high price of provisions and the scarcity of employment," by the Registrar of *Sutton*, *Macclesfield*. The Registrar of *Little Bolton* remarks that:

"The severity of the weather, and the extremely high price of provisions, have caused such a severe pressure upon the working classes, as to prevent them from obtaining any thing like a sufficiency of food, which, with the absence of other comforts, has operated materially in promoting epidemics and other diseases."

The deaths in the March quarters of 1846 and 1847 were, in the district of *Brighton*, 211 and 369; the *Isle of Wight*, 178 and 251; *Portsea Island*, 290 and 430; *Winchester*, 107 and 173; *Windsor*, 75 and 134; *Oxford*, 75 and 122; *Bedford*, 172 and 279; *Cambridge*, 139 and 180; *Devizes*, 83 and 162; *Dorchester*, 107 and 178; *Exeter*, 202 and 290; *Plymouth*, 194 and 254; *Bath*, 388 and 548; *Bristol*, 427 and 545; *Clifton*, 376 and 508; *Stroud*, 189 and 339; *Cheltenham*, 215 and 316; *Shrewsbury*, 112 and 165; *Worcester*, 153 and 226; *Kidderminster*, 150 and 218; *Dudley*, 588 and 931; *Wolverhampton*, 574 and 769; *Wolstanton*, 289 and 326; *Birmingham*, 876 and 1187; *Aston*, 265 and 354; *Leicester*, 342 and 442; *Basford*, 344 and 514; *Macclesfield*, 387 and 541; *Great Boughton* (with Chester), 279 and 394; *Liverpool*, 1934 and 3068; *Blackburn*, 546 and 786; *Preston*, 566 and 813; *Prescot*, 237 and 481; *Manchester*, 1527 and 2185; *Huddersfield*, 629 and 1006; *Leeds and Hunslet*, 996 and 1557; *Gateshead*, 255 and 330; *Tynemouth*, 318 and 434; *Newcastle-on-Tyne*, 567 and 655; *Carlisle*, 248 and 340; *Abergavenny*, 327 and 450; *Wrexham*, 207 and 336.

The disastrous effect of the immigration of the Irish poor on the health of English towns, was dwelt on in the previous Quarterly Return. The evil increased during the winter quarter; and the deaths of Liverpool, where the mortality has always been high, were 3068, or 1134 more than in the winter quarter of 1846, and nearly 1000 above the average of ordinary seasons. The Registrars' notes, under Liverpool, Manchester, Stockport and Preston, contain some information on the subject. Notwithstanding the depressing aspect of this overflow of pauperism from a third part of the United Kingdom, left for centuries without an efficient poor-law, the authorities of the English towns, which the visitation has reached, appear to have made every provision in their power for the relief of the unfortunate people. For thousands of the Irish peasantry they have found food; for thousands, graves; and many of their officers and townsmen have fallen in the courageous discharge of the duties thrown on them,—in one sense by a natural calamity—in another by a national crime. The Registrar of the *Howard Street* sub-district, Liverpool, remarks that

"The return shows a very great increase in the mortality of this district, which is, without doubt, solely attributable to the many thousands of Irish paupers who have landed here within the last three months, bringing with them a malignant fever, which is here very properly called "the Irish fever;" and many hundreds of them were suffering from diarrhœa and dysentery when they arrived, which will account for so many deaths from those causes. Every thing which humanity could devise and money carry out for their cases has been adopted by the Select Vestry; but so many thousands of Irish are continually pouring in, and their habits are so disgustingly filthy, that little can be done as yet to stay the great mortality amongst them. Perhaps there is not a parallel case to Liverpool for the last two months in the history of the country."

The new poor-laws now passing through, or about to be proposed to Parliament, will no doubt mitigate these evils.

Fifteen Thousand Two Hundred and Eighty-nine deaths were registered in London during the first thirteen weeks of the year; a greater number than has been registered in any previous winter since the weekly table commenced. The district of Lewisham, and the sub-district of Hampstead, united now to the London districts, have only added 171 to the deaths. Upon the whole the health of London, like that of the rest of the country, has been below the average; and although the causes are to a certain extent accidental, and as we may hope, transitory, it is evident that the health of towns in England is at present stationary, not to say retrograding.

The English system of registration, however imperfect it may still be, has realized the expectation held out in the opening speech of the minister who introduced the measure to parliament, in so far as "it enables the Government to acquire a general knowledge of the state of the population of the country"*. In successive Reports the births, deaths, and marriages have been compared with the population of different districts; the prevalence of diseases has been traced in various parts; and the irrefragable proofs of the high mortality in towns induced the late Government to appoint a commission of inquiry, which resulted in a bill submitted to parliament by Lord Lincoln and Sir James Graham. A new bill for improving the health of towns has been prepared and brought in by the Viscount Morpeth, Lord John Russell and Sir George Grey. As this bill is likely to occupy the attention of parliament in the present session, it may be useful to introduce here some extracts from a series of calculations, based on the census returns, and the deaths registered during the seven years 1838—44. The facts and methods of calculation will be given at length in the next annual Report; in the mean time it will be sufficient to observe that the object of the investigation is to exhibit the mortality at different periods of life in the divisions, counties, towns, and groups of country districts into which England and Wales have been divided. From these

* See Speech of Lord John Russell on bringing forward the Bill for the Registration of Births, Deaths, and Marriages.—*Mirror of Parliament*, p. 131, 1836.

results the duration of life can be deduced. Corrections have been made for the increase of population, deaths in hospitals, and other disturbing causes.

The mortality in Liverpool, Manchester, and some other places has been before adverted to. The subsequent tables shew the mortality of all the districts now included in the London tables of mortality. They afford ample materials for reasoning; but I shall here only direct attention to a few of the points bearing more immediately on the great question of the health of towns. London contained 1,950,000 inhabitants in the middle of the year 1841; and 342,000 deaths were registered within its limits in the septennial period, of which 1841 was the middle year. The deaths on an average were 48,857 annually. To 1,000 females living at all ages 23 died, while to 1,000 males living at all ages 27 died yearly. The mortality of females in the neighbouring counties, during the same seven years, was from 18 to 20; of males 19 to 21 in the 1,000; the mortality of females in London was 5, of males 8 in the 1,000 more than in the healthiest county. Out of an equal number of males living, there were 3 deaths in London for every 2 in the healthy counties. Out of 1,000 boys under 5 years of age in Surrey, and 1,000 in Sussex, 48 and 50 died annually; out of 1,000 in London, 93 died annually. The mortality of children under 5 years of age is twice as great in London as in the adjacent counties, including several towns.

In	Annual deaths at all ages to		Annual deaths under 5 years of age to	
	1,000 females living	1,000 males living	1,000 girls living	1,000 boys living
Surrey	18	19	41	48
Sussex	18	19	42	50
Hampshire	18	20	44	52
Kent	19	21	48	57
Berkshire	20	20	46	53
London	23	27	80	93

The excess of deaths in London is not the result of climate, for the climate differs little from that of surrounding counties; and some of the London districts are not more unhealthy than many country districts. Take Lewisham, for instance, comprising Blackheath, Sydenham, Eltham, and Lewisham itself. The annual mortality of females was 16; of males, 18 in 1000.

The actual deaths registered in London during the 7 years 1838—44 were	342,000
If the mortality during the period had not been greater than in Lewisham, the deaths in London would have been about	244,128
Excess of deaths in London	97,872

Here are 97,000 deaths in 7 years from causes peculiar to London. Other districts may be taken in the place of Lewisham, but the result would be the same.

A considerable part of the population of London is recruited from the country, immigrants entering chiefly at the ages 15 to 35, in a state of good health. The sick and weakly probably remain at home; many of the newcomers too, unmarried, when attacked in London by slow consumption—the most fatal disease at the ages 15 to 35—return to their father's house to die; so that the mortality of the great city is made to appear in the returns lower at those ages than it is. If we take children under 5 years of age, where neither these disturbing causes nor occupation interfere, the deleterious influence on health, of London in its present state, will appear undisguised in all its magnitude.

The deaths registered in London (1838—44) under 5 years of age were	139,593
The deaths, if the mortality had not been higher than in Lewisham, would have been	80,632
Excess of deaths in London among children	58,961

Here are more than 58,000 children destroyed in London within 7 of the last 10 years.

In these plain and appalling facts—in the detailed statements that follow of the mortality at each age of life in the several districts—or in the circumstances of the several parts of the population, it is difficult to discover any valid reasons for excluding London from the operation of the measure of Her Majesty's Government for "*improving the Health of Towns in England.*"

There are, however, circumstances peculiar to the metropolis, which present difficulties, and which must be taken into account. The Health of Towns Bill—with the Improvement Clauses—proposes to enable the mayor, aldermen, and burgesses of corporate towns to prepare plans and maps of their respective jurisdictions; to lay out, pave, improve, cleanse streets; provide market-places and slaughter-houses; remove nuisances and dangerous buildings: regulate lodging-houses; secure the ventilation of public buildings; prevent smoke and extinguish fires; lay down sewers and drain houses; procure supplies of pure water and artificial light. It proposes to give the same powers to Town Commissioners, two-thirds of whom are to be elected by the rate-payers—*one-third* to be appointed by Her Majesty—in unincorporated towns. It provides the constituted authorities with qualified officers. The Town Councils or Town Commissioners are to appoint surveyors. The First Commissioner of Her Majesty's Woods and Forests, and three others, are to be "*The Commissioners of Health and Public Works*"—to carry out the Bill—appoint Officers of Health, Inspectors, Auditors, to advise, and to aid the Local Authorities. The Bill gives the "Commissioners of Health and Public Works" power to *enforce* few or no improvements: they can only suggest them; nothing can be done without their knowledge; some things require their approval. The peculiarity of London consists in this, that of its 1,950,000 inhabitants, in 1841, dwelling in 263,000 houses, valued at a rental of nearly £8,000,000, and standing on 115 square miles of land—only 129,201 men, women, and children, dwelling in 16,264 houses, valued at £825,033, standing on an area of less than a single square mile north of the Thames—have the advantage of Municipal Institutions. The rest of the metropolis is governed by innumerable Vestries, Paving Boards, Sewers' Commissions, Water Companies, Gas Companies, and other bodies, which escape observation, and, to a certain extent, responsibility. The Commissioners appointed to inquire into Municipal Corporations in 1837, reported that, in 1831, the assessed taxes paid by the city were £205,476, by the rest of the Metropolis included in the Parliamentary Boroughs £1,022,131. "With respect," they say, "to the nature of the population, it is well known that, on the one hand, the City contains by far the most active commercial district of the metropolis, and that it forms the northern bank of the highest part of the Thames accessible to large vessels; and, on the other, that it does not contain either the Courts of Law, the Houses of Parliament, or Government Offices, or generally speaking the residences of the higher or more opulent classes." The "Corporation Reform Act," in other cities brought all the parts that would popularly be termed the town, within the scope of the municipal authority. Having "pointed out how small a proportion of the metropolis is comprehended within the municipal boundary," they profess themselves "unable to discover any circumstances justifying the present distinction of this particular district from the rest, except that *in fact* it is, and had long been so distinguished."* The Health of Towns' Bill, without raising the question of Municipal Reform, proposes to deal tenderly, but impartially with London; it leaves the City in possession of all its privileges, and will apparently give to it the same powers under the Act, and subject it to the same inspection as the Reformed Municipal Corporations; while the rest of the metropolis is to be dealt with on the same general principle as unincorporated towns, the Act being put in execution by "Town Commissioners," "possessed of real or personal estates to the amount of £5000, or rated to the relief of the poor upon the annual value of not less than £50, of whom *one-third* shall be from time to time appointed by Her Majesty, and the remaining *two-thirds* shall *be elected by the rate payers of the several parishes or places included within such district.*" Such is a brief outline of the important measure which has been proposed by Her Majesty's Government to improve the Health of London, as well as of the other Towns of the Kingdom, and so to put a stop if possible to the sickness, suffering, and dreadful loss of life brought to light by the Registration Returns.

Without going more into detail, contending that the details admit of no improvement, or being sanguine enough to imagine that the Municipal Authorities will carry out as rapidly as could be desired the plans for the improvement of the health of the town population—it must be admitted that, on the whole, the Health of Towns' Bill is an excellent measure, and well calculated to diminish the evils which have been discovered, and of which the effects have been recorded in these periodical returns. It is no innovation on the institutions of the country, and rests on no newfangled doctrines. It extends the rule of a Cabinet Minister from "possessions" which Mr. Burke declared "fitter for the care of a frugal land steward than of an office in the state," † to the domain of National Health, which has always held the first place in the meditations of Legislators; it concentrates offices that ought not to be separated, in the hands of the municipal authorities, still maintained in close connection (as they always have been) with the Crown; it seeks to secure water, pure air, and a little sunshine, for the inhabitants of cities—now so large, active, and important a part of the population—and to extend to the house and street of the tradesman, artizan, and laborer, a share of the advantages which elsewhere are the boon of nature, by the use of means which have been suggested by science, and sanctioned by long experience.

A brief sketch of the Health of Towns question will show that it is not based on new, but on well

* See Extract from the Commissioners Report, page 14.

† Burke's speech on Economical Reform.

established doctrines. The influence on health, of exercise, food, and temperature which is modified by clothing, firing, and lodging—is universally known. The command over these necessaries of life depends on the freedom, industry, and commerce of a country; protection against fatal privation is afforded by the laws. The equal importance of air, water, and locality, was perceived by Hippocrates, who wrote his celebrated treatise on these topics four or five centuries before the Christian era. The exposition of a city to the rays of the rising or setting sun—to the north or the south; the qualities of the waters used by the inhabitants; and the nature of the soil and climate produced effects on the character, diseases, and institutions, which he observed and described. In Scythia and Egypt, Greece and Asia, man was not then the same; in general, the "form and disposition corresponded with the nature of the place." This doctrine, illustrated by Cicero,* exaggerated by Montesquieu, has prevailed down to the present day; and one of the latest physiologists treating of "domestication," after having shown how the varieties of species of animals arise in the tame, and disappear again in the wild state, observes that, "the modifiers of the human race, as well as of domestic animals, are always local circumstances, *habitation*, kind of life, diet; the first effects being variations in size and colour, and then in the proportion and form of organs."†

The influence of these elements on health, and of the others with which the sanatory measure deals, was emphatically stated sixty years ago by Dr. Price, no mere theorist in this matter, but the scientific founder of the Equitable Insurance Society. After shewing, from a comparison of the duration of life, in London and Holy Cross, Stockholm and Sweden, Manchester and the parts around, that human life is shorter by almost one-half in cities than in the country, he adds :—

"From this comparison it appears with how much truth great cities have been called the graves of mankind. It must also convince all who consider it, that, according to the observation at the end of the Second Essay, it is *by no means strictly proper to consider our diseases as the original intention of nature. They are, without doubt, in general, our own creation.* Were there a country where the inhabitants led lives *entirely natural and virtuous, few of them would die without measuring out the whole period of the present existence allotted them;* and death would come upon them like a sleep, in consequence of no other cause than gradual and unavoidable decay. Let us, then, instead of charging our Maker with our miseries, learn more to accuse and reproach ourselves."

"The reasons of the baleful influence of great towns, as it has been now exhibited, are plainly—First, the irregular modes of life, the luxuries, debaucheries, and pernicious customs, which prevail more in towns than in the country. Secondly, the foulness of the air in towns, occasioned by uncleanliness, smoke, the perspiration and breath of the inhabitants, and putrid streams from drains, churchyards, kennels, and common sewers."‡

This induction, drawn with great sagacity from a limited number of facts, gradually acquired strength; the experiments in prisons and the navy confirmed it; Mr. Milne after Dr. Price demonstrated the high mortality of towns, and of marsh lands; and Mr. Edmonds in the *Lancet*, proved from the census and the returns, imperfect as they were, of the parish registers for six towns of England, for London and the several counties, as well as from correct returns for Glasgow, that the mortality at all ages, was from about 2·8 to 3·0 per cent. in towns—nearly 2·1 per cent. in all England, and as low as 1·7 or 1·8 in some counties. Mr. Edmonds also shewed, that the mortality bears a certain relation to sickness at each age. For every annual death, two persons are constantly suffering from sickness, of a severity that disables labouring men from work. According to Mr. Neison's recent observations, there are 2·5 constantly sick in Friendly Societies to one death under 60; the recorded sickness after 60 is greater; the sickness in infancy is unknown. But if we assume that 2·5 are sick to one death—and this proportion certainly does not include slight illness, or all for which people take physic—the numbers *constantly sick* in London were 122,000, and the annual attacks of sickness more than 1,220,000, during the seven years 1838-44; the number of annual attacks would have been at least 350,000 less, and the number *constantly sick* would have been 35,000 less, if the health of London had been as good even as that of Lewisham, one of the districts within its own limits. This view, and all the principal facts known in connexion with the public health of England, were discussed in the article Vital Statistics, of M^c^Culloch's Statistical account of the British Empire, which appeared in 1837. The cholera epidemic, followed by an influenza in 1837, more fatal than cholera, and an epidemic of typhus, had drawn attention to the state of public health; the Registration Bill was brought into operation; Dr. Arnott, Dr. Kay (now Kay Shuttleworth), and Dr. Southwood Smith, were appointed by the Poor-Law Commissioners to inquire into the causes of fever in parts of London in 1838; Mr. Chadwick conducted an inquiry into the health of many towns of the kingdom in 1839; subsequently, a Committee of the House of Commons, of which Mr. Slaney was chairman, collected evidence and drew up a report in 1840; and in 1843, a Royal Commission was appointed to inquire into the whole subject. The reports of the Commission § appeared in 1844 and 1845.

In the first annual report from this office, in 1839, the mortality in 32 districts of London was calculated, and it was shewn that, in 1837, the mortality increased from 18, in the healthiest districts, to 32 and 39 in the crowded poor districts; and as wages are better, and the food more substantial in London, than are enjoyed by the families of agricultural labourers, the source of the high mortality in cities was traced to the insalubrity of the atmosphere, the causes of which were enumerated.‖ The six reports which followed contained more information on the subject; and in connexion with the Census, fully established the early opinions of the influence of air, water, and locality

* See the Oration *contra* RULLUM, on the Agrarian Law: "Non ingenerantur hominibus mores tam a stirpe generis, ac seminis, quam ex iis rebus, quæ ab ipsa natura loci, et a vitæ consuetudine suppeditantur; quibus alimur, et vivimus." Instancing the Carthaginians and Ligurians he adds: "Campani semper superbi bonitate agrorum, et fructuum magnitudine, urbis [Capuæ] salubritate, descriptione, pulchritudine, &c."

† Geoffroy, Saint Hilaire, *Art.* "Domestication," in the *Encyclopèdie Nouvelle*, Paris, 1838.

‡ Price's Works, by Morgan, 7th ed. vol. ii. p. 129.

§ The Commissioners were:—The Duke of Buccleuch; Lord Lincoln; R. A. Slaney, Esq.; George Graham, Esq.; Sir H. T. De La Beche; Dr. Lyon Playfair; Dr. D. B. Reid; Richard Owen, Esq.; Capt. W. Denison, R.E.; J. R. Martin, Esq.; James Smith, Esq.; Robert Stephenson, Esq.; W. Cubitt, Esq.

‖ Reg.-Gen., 1st Rep., p.p. 1. 108—117.

on health—and the principle "that the mortality has a tendency to increase as the population increases, but that the unhealthful tendency can be counteracted by artificial agencies; in other terms, that the mortality of cities in England is high, but that it may be immeasurably reduced."* Some room for doubt, however, existed, as the calculations in the earlier Reports relative to London were partly derived from the Census returns of 1831; as the deaths were known only for a few years; and as the mortality at different ages could not be calculated, the ages of the living in London having been unfortunately not ascertained at the Census of 1831. All doubt must, however, be dissipated by the present complete series of facts, which embrace all the elements required in statistics to determine the mortality and the duration of life. Instead of the inhabitants of London "*measuring out the whole period of the present existence allotted them,*" it is found that, in 7 years, 139,593 perished in infancy (under 5 years of age); 40,828 in youth (5 to 25); 109,126 in manhood (25—65), and that only 52,453 attained the age of 65 and upwards. Instead of "death coming upon them like a sleep," when the faculties are dulled by age and slow decay,—it convulses tender infancy, falls with burning fevers upon man in his prime, snatches away the mother with the babe still upon her breast. But not to take an extreme view, nor to be too sanguine—and above all to avoid any exaggeration—let us set down here the deaths in London and the deaths which would have happened at different ages if the mortality had not been higher than it was in Lewisham, where any one who will take the trouble may ascertain that many obvious and easily removed causes of insalubrity still exist.

Age.	Deaths in London.	Deaths that would have happened if the mortality had been the same as in Lewisham.	Excess of deaths in 7 years by causes peculiar to London.
0 — 5	139,593	80,632	58,961
5 — 25	40,828	35,706	5,122
25 — 65	109,126	83,447	25,679
65 and upwards	52,453	44,343	8,110
All ages	342,000	244,128	97,872

Such is the excess of mortality. The excess of sickness must have been still greater.

At the two or three meetings held to oppose the Government Bill for improving the Health of Towns, by bodies holding local trusts, no reference was made to the loss of life constantly going on in London. It appears to have been unknown to the speakers, or to have been taken for granted because the mortality is little more than half as high in the present as it was in the 17th century, that the health of the metropolis is perfect; that plague having been expelled, typhus and consumption may be tolerated. Now the plain fact is, that one day with another 134 persons die daily in London; that the great majority are untimely deaths,—children, fathers, mothers, in the prime of life; and that at least *thirty-eight* die daily in excess of the rate of mortality which actually prevails in the immediate neighbourhood. *Thirty-eight* persons are destroyed every day in London by ascertained causes. If these deaths took place on London Bridge or Newgate, would any sensible man in the city oppose any reasonable measure devised by a Minister of the Crown, to put a stop to the frightful sacrifice of life? The city has consented to see Newgate partly free from fever—inspected by an Officer of the Crown. Why is the disease cast out of criminals to be allowed to enter and destroy the labouring multitudes? Are their lives of less value? But the city itself, it is said, is as healthy as it can be; the authorities have done everything that can be done. A minister of health can suggest nothing which the City of London has not already accomplished. Has the Lord Mayor ascertained this by personal inspection? He has the conservancy of the swans and fish of the Thames: and so weighty has this duty been held that the first magistrate attended by the civil authorities proceeds periodically to hold courts of inspection and to ascertain the condition of these creatures. If some time after having been

"To Thames's banks which fragrant breezes fill,"

and seen the white swans on the river and the fishes glide through the clear waters, on landing from his barge below Temple Bar he would place himself under the guidance of Dr. Lynch, a medical officer, and Mr. Hutchinson,† a surgeon and registrar of the city, they could lead the procession on the way to Newgate, Smithfield Market, Houndsditch, and the Tower, through alleys, and lanes, and up courts inhabited by citizens of London, presenting a far different aspect; they would pass through streets on which the sun rarely shines, houses saturated with pestilential vapours—and breezes fanning sewers and excremental matter—the most fatal field of fever in the metropolis. They would see disease gleaming in the eyes of children, wasting the bodies of women, prostrating the strength of men. If they called for the registers of deaths for the City without the walls, they would find in them 13,631 names enrolled in seven years—*five thousand* of which would have had no place there if the "deliberate conviction" of the Commission of Sewers were well founded, that the "City of London for *health*, cleanliness, effective drainage, lighting, and for supply of water to its inhabitants, *cannot be surpassed.*"

* Reg. Gen., 1st Report, 8vo. p. 113.
† See Mr. Hutchinson's accurate account of the wretched state of parts of the West London District, 5th Annual Report, 8vo. p. 537.

I have arranged the thirty-six districts of the metropolis in the relative order of their insalubrity: the *City of London within the walls* stands *ninth* in the list, while *the City of London without the walls* (the East and West London Districts) stands with Whitechapel, the *last, the unhealthiest* of the thirty-six.* That Table displays results, in many respects remarkable. If the short time which has elapsed since the calculations were completed had permitted it, I should have endeavoured to represent the different degrees of mortality in the districts of London, pictured to the eye on a shaded map. A general idea, however, may be formed of the distribution of the poison which causes death. According to the latest researches, it is not a gas, but a sort of atmosphere of organic particles, undergoing incessant transformations; perhaps like malaria not odorous, although evolved at the same time as putrid smells; suspended like dust, an aroma,vesicular water in the air, but invisible†. If it were for a moment to become visible, and the eye could see it from a central eminence such as St. Paul's, the disease-mist would be found to lie dimly over Eltham, Dulwich, Norwood, Clapham, Battersea, Hampstead, and Hackney; growing thicker round Newington, Lambeth, Marylebone, Pancras, Stepney; dark over Westminster, Rotherhithe, Bermondsey, Southwark; and black over Whitechapel and the City of London without the walls. The district of St. Giles would be a dark spot in the midst of surrounding districts; St. George, Hanover-square, and St. James in Westminster, would be lighter than Marylebone, and St. Martin-in-the-Fields; part of the City of London within the walls would present a deep contrast to the City without the walls. This disease-mist, arising from the breath of two millions of people, from open sewers and cesspools, graves and slaughter-houses, is continually kept up and undergoing changes; in one season it is pervaded by cholera, in another by influenza; at one time it bears small-pox, measles, scarlatina, and hooping-cough among young children; at another it carries fever on its wings. Like an angel of death it has thus hovered for centuries over London. But it may be driven away by Legislation. If this generation has not the power to call the dead up from their graves, it can close thousands of graves now opening. The poisonous vapour may yet clear away from London—and from all the other towns of the kingdom :—some of the sunshine, pure water, fresh air, and Health of the Country, may be given to the grateful inhabitants of towns by the parting voice of the Legislature.

* See Table C.

† This question is fully discussed in the Appendix to the Registrar-General's Fifth Annual Report.

LONDON. *(For districts in London see Table* C.)

Ages.	Population, July 1st, 1841.			Deaths registered in the 7 years 1838—44.			Deaths that would have been registered in the 7 years 1838—44, if the Mortality had been the same as in Lewisham.			Excess of Deaths in London.
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	
0—	231,068	113,776	117,292	139,593	73,776	65,817	80,632	42,349	38,283	58,961
5—10	194,243	95,927	98,316	16,136	8,269	7,867	10,096	5,288	4,808	6,040
10—15	178,060	88,789	89,271	5,888	2,982	2,906	5,672	2,217	3,455	216
15—25	394,245	176,358	217,887	18,804	9,371	9,433	19,938	9,230	10,708	—1,134
25—35	367,276	167,305	199,971	25,381	12,556	12,825	23,001	12,589	10,412	2,380
35—45	257,204	120,952	136,252	28,234	15,117	13,117	19,797	10,377	9,420	8 437
45—55	166,718	78,520	88,198	27,264	14,925	12,339	20,321	10,161	10,160	6,943
55—65	94,840	43,541	51,299	28,247	14,599	13,648	20,328	11,309	9,019	7,919
65—75	48,937	21,055	27,882	28,733	13,474	15,259	20,701	8,483	12,218	8,032
75—85	15,572	5,999	9,573	18,541	7,721	10,820	17,833	9,016	8,817	708
85—95	2,218	740	1,478	4,782	1,648	3,134	5,325	1,965	3,360	—543
95 and upwards	145	49	96	397	128	269	484	147	337	—87
All ages	1,950,526	913,011	1,037,515	342,000	174,566	167,434	244,128	123,131	120,997	97,872

TABLE
OF THE
DEATHS

In 117 of the Districts of England (including the principal Towns): shewing the Number of Deaths Registered in the quarters ending March 31st.

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending March 31st — Years								
		1839	1840	1841	1842	1843	1844	1845	1846	1847
Total	6612800	42410	46376	46967	44903	43748	46136	49949	43859	56105
Ditto, exclusive of London	4664589	30480	34217	32879	32120	31116	32494	35263	31332	40816
Aggregate Deaths in the 11 Divisions of England.										
*1 London	1948211	11930	12159	14088	12783	12632	13642	14686	12518	15289
2 South Eastern	218181	1120	1124	1295	1172	1282	1391	1357	1002	1588
3 South Midland	155225	823	1056	932	902	934	1131	1024	864	1086
4 Eastern	128921	983	829	769	780	776	931	1117	839	852
5 South Western	327869	1789	1957	1955	2020	1975	2111	2001	1654	2248
6 Western	776002	4626	5144	5557	5649	4949	5418	6144	4844	6601
7 North Midland	234771	1298	2012	1607	1533	1545	1636	1720	1470	1856
8 North Western	1530460	11774	13253	12038	11877	11603	11368	12896	11928	15557
9 York	691131	4430	4713	4666	4689	4379	4492	5015	4678	6091
10 Northern	328902	2013	2089	2251	2026	2020	1969	2009	2314	2724
11 Welsh	273127	1624	2040	1809	1472	1653	2047	1980	1739	2213
Districts.										
† London										
West Districts	301326	1677	1760	2006	1912	1799	1975	2240	1867	2146
North Districts	376396	2238	2235	2525	2448	2446	2552	2817	2326	2859
Central Districts	374759	2447	2410	2925	2444	2382	2547	2767	2156	2742
East Districts	393247	2551	2548	3036	2593	2718	2975	2976	2503	3420
South Districts	502483	3017	3206	3596	3386	3287	3593	3886	3666	4122
S. Eastern Division										
Maidstone	32310	193	216	167	216	219	218	235	141	231
Brighton	46742	244	231	293	223	315	329	262	211	369
Isle of Wight	42547	165	159	241	196	182	207	228	178	251
Portsea Island	53036	306	292	356	306	344	344	388	290	430
Winchester	23044	112	141	117	128	133	170	147	107	173
Windsor	20502	100	85	121	103	89	123	97	75	134
S. Midland Division										
St. Albans	17051	72	91	69	102	91	109	121	74	100
Wycombe	34150	158	245	202	180	212	239	229	218	199
Oxford	19701	123	129	81	135	96	108	63	75	122
Northampton	28103	165	189	195	175	178	211	249	186	206
Bedford	31767	172	236	188	183	217	236	208	172	279
Cambridge	24453	133	166	197	127	140	228	154	139	180
Eastern Division										
Colchester	17790	137	137	99	102	104	136	117	123	128
Ipswich	25254	184	155	160	164	145	174	124	159	197
Norwich	61846	562	410	373	388	379	425	711	325	379
Yarmouth	24031	100	127	137	126	148	196	165	232	148
S. Western Division										
Devizes	22130	147	141	126	111	186	148	156	83	162
Dorchester	23380	122	115	129	114	136	166	123	107	178
Exeter	31333	187	223	199	245	214	262	208	202	290
St. Thomas	47105	225	275	195	270	220	249	230	226	274
Plymouth	36527	197	194	253	250	274	269	261	194	254
Redruth	48062	279	273	249	263	254	271	268	220	252
Penzance	50100	238	243	307	275	283	239	235	234	290
Bath	69232	294	493	497	492	408	507	520	388	548
Western Division										
Bristol	64298	407	590	587	483	503	464	563	427	545
Clifton	66233	303	433	461	412	380	424	448	376	508
Stroud	38920	195	212	223	212	272	207	235	189	339
Cheltenham	40221	193	239	268	281	241	228	267	215	316
Hereford	34427	220	196	206	224	250	244	205	208	209

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending March 31 — Years							
		1839	1840	1841	1842	1843	1844	1845	1846
Shrewsbury	21529	161	155	146	189	148	163	164	112
Worcester	27130	197	177	173	133	155	214	173	153
Kidderminster	29408	174	191	225	175	150	242	233	150
Dudley	86028	479	519	603	741	474	547	776	588
Walsall	34274	211	213	290	267	215	197	260	259
Wolverhampton	80722	532	539	653	756	467	540	649	574
Wolstanton	32669	212	244	195	260	271	247	271	239
Birmingham	138187	906	941	1052	1027	895	1118	1275	876
Aston	50928	252	303	301	305	263	349	353	265
Coventry	31028	183	192	174	184	265	234	272	213
N. Midland Division									
Leicester	50932	320	548	431	392	367	415	445	342
Lincoln	36110	164	195	222	209	202	242	196	209
Nottingham	53080	332	525	340	339	376	385	480	293
Basford	59634	290	481	239	309	377	328	349	344
Derby	35015	192	263	275	284	223	266	250	282
N. Western Division									
Stockport	85672	711	697	646	589	700	477	721	562
Macclesfield	56018	369	621	414	361	537	393	482	387
Gt. Boughton, inc. Chester	49085	306	333	384	388	309	345	365	279
Liverpool	223054	1791	2133	2053	2032	1863	1996	1815	1934
West Derby, (adj. Liverpool	88652	411	539	601	576	567	575	668	746
Blackburn	75091	518	697	503	539	626	514	642	546
Preston	77189	525	632	708	614	509	506	643	566
Rochdale	60577	475	551	419	454	413	479	502	560
Bury	77496	579	678	628	699	530	613	558	605
Bolton	97519	761	757	841	774	754	678	813	817
Wigan	66032	453	668	472	549	415	641	453	538
Prescot	43739	257	400	273	327	278	241	262	237
Chorlton	93736	565	684	644	604	551	622	868	699
Manchester	192408	1918	1852	1608	1592	1649	1541	1922	1527
Salford	70228	624	547	543	487	588	502	497	512
Ashton	173964	1511	1464	1301	1292	1314	1245	1685	1413
York Division									
Sheffield	85076	635	638	646	740	582	579	650	611
Huddersfield	107140	540	638	638	561	662	607	699	629
Halifax	109175	655	708	674	614	685	670	736	794
Bradford	132164	814	969	888	884	795	949	1120	1003
Leeds & Hunslet‡	168667	1219	1073	1173	1333	1135	1088	1228	996
Hull	41130	259	336	362	244	254	327	262	309
York	47779	308	351	285	313	266	272	320	336
Northern Division									
Sunderland	56226	360	358	427	367	315	306	335	490
Gateshead	38747	254	244	254	245	246	216	252	255
Tynemouth	55625	318	310	374	320	337	334	303	318
Newcastle-on-Tyne	71850	483	532	488	474	565	435	466	567
Carlisle	36084	174	210	330	255	193	271	214	248
Cockermouth	35676	211	194	210	186	191	184	220	213
Kendal	34694	213	241	168	179	173	223	219	223
Welsh Division									
Abergavenny	50834	345	442	364	339	319	472	404	327
Pontypool	25037	188	179	178	123	175	142	139	210
Merthyr Tydfil	52864	385	536	388	284	318	567	508	465
Newtown	25958	96	193	147	119	130	145	151	120
Wrexham	39542	218	260	291	238	278	266	238	207
Holywell	40787	212	280	264	215	259	253	311	203
Anglesey	38105	180	150	177	154	174	202	229	207

* The last quarter in London ended March 27th, 1847.

† The Mortality of the Districts of Wandsworth, and Lewisham, and Sub-District of Hampstead, is included in the above Table, in each of the nin years, though the deaths in Wandsworth did not appear in the Weekly Metropolitan Returns till 1844; nor those of Lewisham and Hampstea till 1847.

‡ The former District of Leeds is now divided into the districts of *Leeds* and *Hunslet*, both included in the present return.

A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES,

Registered in the Eight first Quarters of the 8 *Years* 1840-41-42-43-44-45-46-47.

USES OF DEATH	Quarters ending March * YEARS 1840	1841	1842	1843	1844	1845	1846	1847
Causes	11989	13930	12626	12504	13471	14528	12376	15289
CIFIED CAUSES	11943	13882	12571	12463	13403	14491	12322	15245
.—Zymotic (or Epidemic, Endemic, and Contagious) Diseases ..	1810	2398	1880	2099	2457	2506	2277	1926
SPORADIC DISEASES:—								
.—Dropsy, Cancer, and other Diseases of uncertain or variable Seat	1472	1614	1586	1432	1282	1450	1273	1386
.—Diseases of the Brain, Spinal Marrow, Nerves and Senses..	2066	2107	1956	2048	2177	2193	2046	2296
.—Diseases of the Lungs and of the other Organs of Respiration .	3945	4604	4325	4048	4644	4923	3807	5981
.—Diseases of the Heart and Blood Vessels ..	254	300	282	323	416	512	455	666
.—Diseases of the Stomach, Liver, and other Organs of Digestion.	714	883	820	781	795	981	940	1030
.—Diseases of the Kidneys, &c.	63	70	86	69	93	115	130	169
.—Childbirth, Diseases of the Uterus, &c.	118	180	112	158	114	174	150	205
.—Rheumatism, Diseases of the Bones, Joints, &c.	91	90	65	79	74	98	121	141
.—Diseases of the Skin, Cellular Tissue, &c. .	17	17	21	23	23	12	53	46
.—Old Age	1034	1274	1079	1111	1018	1127	612	971
.—Violence, Privation, and Intemperance ..	359	345	359	292	310	400	458	428
.—Small Pox	106	608	74	145	252	481	77	82
Measles	202	160	311	272	334	381	401	99
Scarlatina	530	170	123	299	536	421	221	196
Hooping Cough	298	655	731	509	487	411	767	544
Croup	96	96	133	110	107	112	79	67
Thrush	65	45	35	41	45	50	35	38
Diarrhœa	57	68	81	69	79	109	119	178
Dysentery	15	17	21	33	29	14	20	34
Cholera	3	1	..	6	4	4	7	3
Influenza	22	14	32	28	66	34	22	63
Ague	3	6	7	5	5	5	4	4
Remittent Fever ..	4	4	5	5	6	5	15	26
Typhus	342	328	255	508	432	362	410	442
Erysipelas	59	92	60	57	61	95	71	116
Syphilis	8	4	11	12	12	21	28	34
Hydrophobia	..	..	1	..	2	1	1	..
.—Inflammation	90	68	71	50	18	..	..	..
Hæmorrhage	34	56	34	33	30	29	24	37
Dropsy	478	517	519	470	392	413	145	204
Abscess	51	51	36	40	23	10	18	18
Noma	..	..	..	..	..	3	9	3
Mortification	77	83	52	55	49	53	44	57
Purpura	4	..	3	2	5	2	5	16
Scrofula	30	25	30	23	36	40	75	53
Cancer	98	87	101	93	141	194	235	177
Tumor	15	20	23	22	13	5	3	3
Gout	13	25	24	18	14	4	3	20
Atrophy	63	89	108	94	150	189	224	239
Debility	299	325	314	295	214	270	300	337
Malformations	8	15	12	15	23	31	51	49
†Sudden Deaths	212	253	259	222	174	207	137	173
.—Cephalitis	144	165	139	132	160	149	153	156
Hydrocephalus	462	450	440	418	481	460	488	440
Apoplexy	263	243	255	264	301	343	329	368
Paralysis	214	246	230	239	281	298	273	342
Convulsions	741	771	662	742	702	696	511	619
Tetanus	9	8	9	3	8	3	7	2
Chorea	2	1	..	..	3	2	..	2
Epilepsy	64	56	64	64	57	62	73	113
Insanity	23	15	12	6	22	15	21	28
Delirium Tremens..	18	15	17	21	19	24	34	47
Disease of Brain, &c.	126	137	128	159	143	141	157	179

CAUSES OF DEATH	Quarters ending March * YEARS 1840	1841	1842	1843	1844	1845	1846	1847
IV.—Laryngitis	5	7	5	9	9	23	35	62
Quinsey	21	19	14	21	17	25	10	17
Bronchitis	167	308	287	254	444	632	758	1661
Pleurisy	21	27	24	23	24	28	33	67
Pneumonia	928	1294	1290	1168	1327	1296	946	1390
Hydrothorax	110	78	89	76	102	92	50	85
Asthma	562	751	588	458	555	606	244	625
Phthisis or Consumption	1910	1833	1781	1787	1904	1972	1571	1823
Disease of Lungs, &c.	221	287	247	252	262	249	160	251
V.—Pericarditis	9	17	10	9	24	33	17	29
Aneurism	6	16	6	10	9	21	18	14
Disease of Heart, &c.	239	267	266	304	383	458	420	623
VI.—Teething	187	247	227	225	157	227	129	143
Gastritis	180	214	213	173	19	14	24	23
Enteritis					141	177	117	102
Peritonitis	18	17	10	16	30	44	48	61
Tabes Mesenterica.	56	64	73	73	100	116	139	192
Worms	5	10	4	3	3	8	19	19
Ascites	12	5	6	8	21	24	29	26
Ulceration (of Intestines, &c.)	18	23	18	17	21	25	36	34
Hernia	27	32	31	27	34	31	35	58
Colic or Ileus	22	48	25	22	37	38	36	31
Intussusception ..	1	1	3	1	6	4	9	9
Stricture	5	12	6	6	6	6	8	7
Hæmatemesis	3	1	6	3	11	14	13	21
Disease of Stomach, &c.	56	54	50	42	66	68	78	79
Disease of Pancreas	1	..	..	..	..	..	..	..
Hepatitis	14	20	12	13	16	22	49	44
Jaundice	26	30	22	35	28	32	34	31
Disease of Liver, &c.	82	105	111	117	97	131	131	149
Disease of Spleen..	1	..	3	..	2	..	6	1
VII.—Nephritis	3	10	9	5	3	6	10	5
Ischuria	4	2	..	1	1	..	2	3
Diabetes	3	11	5	6	8	12	4	9
Cystitis	5	1	8	2	6	3	3	8
Stone	10	4	2	4	6	6	7	12
Stricture	6	3	6	11	14	13	13	16
Disease of Kidneys, &c.	32	39	56	40	55	75	91	116
VIII.—Childbirth	89	132	80	112	80	133	101	140
Paramenia	4	1	3	4	..	5	3	2
Ovarian Dropsy ..	1	4	8	10	7	6	16	15
Disease of Uterus, &c.	24	43	21	32	27	30	30	42
IX.—Arthritis	3	..	..	..	1	4	3	1
Rheumatism	43	39	20	38	31	35	62	73
Disease of Joints, &c.	45	51	45	41	42	59	56	67
X.—Carbuncle	..	..	2	..	3	..	1	4
Phlegmon	5	1	1	..	..	2	9	9
Ulcer	5	8	11	7	11	4	16	19
Fistula	2	6	3	7	6	1	9	1
Disease of Skin, &c.	5	2	4	9	3	5	18	13
XI.—Old Age	1034	1274	1079	1111	1018	1127	612	971
XII.—Intemperance	1	4	4	10	11	15	17	12
Privation	5	18	11	8	7	8	7	22
Violent Deaths ..	353	323	344	274	292	377	434	394
Causes not specified	46	48	55	41	68	37	54	44

* The mortality of the district of Lewisham, and sub-district of Hampstead, was included in the Metropolitan Returns at the commencement of 1847, for the first time. Therefore the deaths for previous years are not contained in the above table. In the Quarters ending March they were respectively (1840) 170; (1841) 158; (1842) 157; (1843) 128; (1844) 171; (1845) 158; (1846) 142.

† Under the head of *sudden deaths* are classed not only deaths described as sudden, of which the cause has not been ascertained or stated; but also all deaths returned by the coroner in vague terms, such as "found dead," "natural causes," &c. &c.

TABLE C.

ANNUAL MORTALITY of MALES and FEMALES in the DISTRICTS OF LONDON, arranged in the order of the Mortality of FEMALES of all Ages, the healthiest Districts being placed first,

(This Table is deduced from the Population enumerated in 1841, *and the Deaths registered in the 7 years* 1838-1844.*)*

LONDON.		Deaths of FEMALES to 1000 Living, in each District, and at each Age.												Deaths of MALES to 1000 Living, in each District, and at each Age.										
No.	DISTRICTS. Years.	0 — 5	5 — 10	10 — 15	15 — 25	25 — 35	35 — 45	45 — 55	55 — 65	65 — 75	75 — 85	85 — 95	All Ages	All Ages	0 — 5	5 — 10	10 — 15	15 — 25	25 — 35	35 — 45	45 — 55	55 — 65	65 — 75	75 — 85	85 — 95
	Lewisham	47	7	6	7	7	10	16	25	63	132	324	**16**	**18**	53	8	4	7	11	12	18	37	58	215	379
2	St. George, Hanover Square	80	12	5	4	5	10	16	32	85	193	254	**16**	**20**	87	13	5	6	8	15	23	41	84	192	441
	Hampstead	49	11	6	7	8	11	12	26	84	121	363	**17**	**23**	63	10	3	6	12	14	22	54	117	181	230
9	Hackney	56	10	4	6	8	11	14	29	62	120	320	**17**	**22**	66	10	5	9	11	15	21	38	88	141	301
28	Camberwell	56	8	4	6	8	13	14	28	64	151	256	**17**	**22**	62	11	5	9	11	15	25	36	70	150	269
	Wandsworth	57	11	6	7	8	11	15	30	64	152	286	**18**	**21**	60	10	6	7	14	18	22	42	84	154	250
8	Islington	57	9	4	6	9	14	20	34	64	166	299	**18**	**21**	69	10	5	8	9	15	21	43	85	168	292
1	(*a*) Kensington (*b*) Chelsea	73	12	5	6	9	12	17	32	76	155	331	**20**	**27**	83	11	5	8	11	20	29	47	92	180	340
16	City of London	77	13	6	4	8	13	21	37	82	154	260	**20**	**23**	101	14	5	6	10	19	30	48	85	209	254
5	St. James, Westminster	93	14	5	4	8	13	21	39	84	209	510	**20**	**22**	108	15	4	4	9	16	25	44	100	201	192
6	Marylebone	85	12	5	5	8	12	19	37	74	165	286	**20**	**25**	100	13	4	6	9	17	27	50	85	178	294
7	Pancras	72	12	5	6	8	13	19	38	79	170	304	**21**	**24**	86	11	5	6	10	16	24	47	93	183	312
26	Newington	70	9	4	6	10	13	17	37	72	154	307	**21**	**25**	88	11	4	7	10	16	25	45	83	204	498
22	Poplar	64	8	6	6	10	13	20	35	81	182	318	**21**	**27**	79	10	7	15	17	22	25	47	89	181	311
27	Lambeth	75	11	4	7	9	15	20	37	76	146	315	**22**	**25**	90	13	5	8	10	16	25	44	86	163	326
30	Greenwich	65	10	5	7	11	14	20	35	72	159	359	**22**	**26**	76	12	4	12	13	21	25	44	74	158	332
4	St. Martin in the Fields	91	16	6	5	8	14	20	48	95	129	430	**23**	**25**	121	17	4	5	11	18	28	49	115	264	501
21	Stepney	73	11	4	7	10	13	20	38	80	159	286	**23**	**26**	82	12	5	10	11	19	26	48	91	188	307
	LONDON	**80**	**11**	**5**	**6**	**9**	**14**	**20**	**38**	**78**	**162**	**303**	**23**	**27**	**93**	**12**	**5**	**8**	**11**	**18**	**27**	**48**	**92**	**184**	**319**
13	Clerkenwell	84	12	5	6	9	15	22	39	79	180	286	**23**	**25**	95	13	4	8	10	19	27	49	93	193	380
18	Bethnal Green	81	10	4	6	10	13	18	35	69	142	265	**23**	**24**	90	10	4	6	9	13	21	39	76	172	348
12	Holborn	91	14	4	6	9	13	20	40	84	192	281	**23**	**24**	103	14	6	5	9	15	26	49	92	162	418
11	Strand	85	14	5	6	9	16	22	46	95	192	302	**24**	**25**	107	15	4	5	9	17	32	47	116	224	398
17	Shoreditch	80	11	5	6	10	15	21	39	76	173	269	**24**	**26**	91	12	5	7	10	17	27	47	96	188	269
3	Westminster	94	13	4	8	11	14	20	42	79	154	316	**25**	**27**	101	14	4	8	12	19	30	44	94	175	443
24	Bermondsey	85	11	4	7	12	15	18	40	77	133	334	**25**	**28**	100	13	4	7	10	18	27	50	99	153	209
29	Rotherhithe	82	16	6	6	10	15	19	41	74	156	310	**25**	**30**	87	15	7	18	16	22	31	49	97	190	233
10	St. Giles	109	12	5	7	11	16	24	47	102	164	237	**26**	**28**	123	14	4	6	11	20	32	52	109	225	762
25	St. George, Southwark	96	13	5	7	10	14	23	47	81	171	267	**26**	**28**	107	13	4	7	10	19	30	54	92	187	395
20	St. George in the East	95	12	5	7	12	16	24	43	84	180	392	**27**	**31**	102	11	5	10	15	20	32	59	108	219	335
23	(*a*) St. Saviour (*b*) St. Olave	102	12	5	7	11	15	23	38	81	161	196	**27**	**30**	113	15	6	9	14	22	32	50	90	178	287
14	St. Luke	93	12	5	8	11	17	24	45	98	154	450	**27**	**28**	109	13	5	7	11	20	29	51	90	193	212
15	(*a*) East London (*b*) West London	104	14	5	6	10	17	25	53	93	208	313	**28**	**29**	128	16	5	7	12	21	34	56	108	198	437
19	Whitechapel	101	13	3	8	11	16	27	45	90	179	347	**28**	**30**	114	14	4	8	13	21	33	57	109	215	371

The Table is read thus:—Lewisham District, out of 1000 Children (Females) living under 5 Years of Age, 47 died; out of 1000 Women living at 45 and under 55 Years of Age, 16 died. East and West London District, out of 1000 Children (Males) living under 5 Years of Age, 128 died; out of 1000 Men living at 45 and under 55 Years of Age, 34 died. London, out of 1000 Women living at 25 and under 35 Years of Age, 9 died; out of 1000 Men living at 25 and under 35 Years of Age, 11 died.

Note.—The return of Deaths in "All Souls," one of the Sub-districts of Marylebone, was found to be incorrect in the years 1840-1844; in the calculation, the Mortality in the 7 years, 1838-1844 was assumed to be the same as in the 4 years, 1838-9-45-6.

DISTRICTS of LONDON—Area, Inhabited Houses, Annual Value of Property, Sums Expended for Relief of Poor, Population, Deaths in Seven Years, and Deaths which would have taken place if the Mortality and ages of the Districts had been as in Lewisham.—(Table chiefly from Fifth Annual Report, pp. 444—5, 8vo.)

	DISTRICTS.	Area in Acres	Inhabited Houses, 1841	Annual Value of Property rated for the relief of the Poor, 1841 †	Sums expended for the relief of the Poor in the year ending March, 1842	Population July 1st, 1841	Deaths in the 7 years 1838—1844	What the Deaths would have been if the Mortality and Ages of Population had been as in Lewisham	Excess of Deaths in the several Districts on preceding hypothesis
	LONDON	74,070	262,757	£ 7,810,216	£ 580,289	1,950,526*	342,000*	235,168*	106,832*
	MIDDLESEX, (part of.)								
1	(*a*) Kensington, (*b*) Chelsea	8,640	16,610	483,344	32,771	114,403	18,438	13,793	4,645
2	St. George, Hanover Square	1,090	7,630	604,105	16,100	66,261	8,357	7,989	368
3	Westminster	840	6,405	207,169	9,107	55,429	10,076	6,683	3,393
4	St. Martin-in-the-Fields	260 *a*	2,438	248,285	11,321	24,422	4,102	2,944	1,158
5	St James, Westminster	165	3,625	250,160	10,567	37,389	5,533	4,508	1,025
6	Marylebone	1,490	14,169	815,279	41,476	137,288	21,585	16,552	5,033
7	Pancras	2,600	14,766	488,501	28,515	128,516	19,884	15,495	4,389
8	Islington	3,050	8,508	212,283	8,693	55,528	7,724	6,695	1,029
9	Hackney	3,950	7,192	160,981	13,140	42,225	5,729	5,091	638
10	St. Giles	250	4,959	236,970	14,583	54,068	10,186	6,519	3,667
11	Strand	163 *b*	4,333	211,521	15,568	43,950	7,196	5,299	2,197
12	Holborn	160 *c*	4,073	120,763	8,981	44,400	7,362	5,353	2,009
13	Clerkenwell	320	6,953	176,338	13,225	56,737	9,591	6,841	2,750
14	St. Luke	240	6,385	178,176	15,205	50,210	9,702	6,054	3,648
15	(*a*) East London, (*b*) West London	258 *d*	8,343 *e*	211,150	31,191	68,228	13,631	8,226	5,405
16	City of London	370 *f*	7,921	613,883	52,586	56,456	8,487	6,807	1,680
17	Shoreditch	620	12,642	169,133	20,430	82,421	14,445	9,937	4,508
18	Bethnal Green	760	11,782	95,549	14,019	73,497	12,287	8,861	3,426
19	Whitechapel	316 *g*	8,834	197,522	19,383	70,849	14,395	8,542	5,853
20	St. George-in-the-East	230	5,985	141,301	14,244	41,320	8,323	4,982	3,341
21	Stepney	2,518 *h*	14,364	212,605	20,911	89,344	15,169	10,772	4,397
22	Poplar	1,250 *i*	5,066	160,657	11,085	31,088	5,198	3,748	1,450
	SURREY, (part of).								
23	(*a*) St. Saviour, (*b*) St. Olave	.. *k*	7,182	194,959	19,135	50,553	10,077	6,095	3,982
24	Bermondsey	620	5,674	76,796	14,143	34,939	6,451	4,212	2,239
25	St. George, Southwark	590 *l*	6,663	102,919	12,343	46,285	8,650	5,580	3,070
26	Newington	630	9,370	131,974	15,628	54,580	8,810	6,581	2,229
27	Lambeth	3,640	17,791	382,548	32,015	115,687	18,785	13,948	4,837
28	Camberwell	4,570	6,843	84,236	6,733	28,938	5,315	4,695	620
29	Rotherhithe	690	2,420	48,230	7,295	13,883	2,682	1,674	1,008
	KENT, (part of).								
30	Greenwich	4,570	11,995	190,105	28,577	73,803	12,223	8,898	3,325
	Wandsworth, added to London, Jan. 1st, 1844	10,800	6,459	218,729	13,553	39,673	5,487	4,783	704
	Lewisham, added to London, Jan. 1st, 1847	16,350	3,966	130,985	5,002	22,877	2,766	2,766	....
	Hampstead, added to London, Jan. 1st, 1847	2,070	1,411	52,760	2,764	9,855	1,399	1,188	211

* The population and deaths in barracks, hospitals, and asylums, are not given in the several districts, although they are included in London.

† From the Poor-Law valuation; and much under the real value according to the Income Tax Returns.

NOTES.

(*a*) This area includes Buckingham Palace, in St. George, Hanover Square district, and St. James's Palace, in St. James's, Westminster; the calculation on the density of the population in St. Martin in the Fields (page 446) is therefore inclusive of those places.

(*b*) The area of the Middle Temple, Clifford's Inn, Serjeant's Inn (Chancery Lane), Clement's Inn, and New Inn, all in this District, is included in East and West London; the calculation (page 446) is consequently made with reference only to the houses (4,032) and population (43,156) of the area given (163 Acres). The other results are obtained from the facts stated in this Table.

(*c*) The Inns of Court in Holborn District being included in the area of East and West London, the density of population is calculated on the remaining area of 160 acres, containing 3,876 houses and a population of 38,790.

(*d*) This area includes the Inns of Court in the Strand and Holborn Districts, together with 28 acres the area of part of St. Sepulchre Parish and Glasshouse Yard Liberty, both in the Finsbury Division of Ossulstone Hundred; the calculation on the population to a square mile, &c., is made on the area (230 acres), inhabited houses (8,289) and population (70,382) of the City of London without the Walls, inclusive of the Inns of Court. The other calculations are founded on the facts stated in this Table.

(*e*) The number of houses in East and West London is 13 in excess of the Census Returns, the Charter House having been enumerated as one house, whereas it contains 14 separate tenements or almshouses.

(*f*) This area, with 7,791 inhabited houses, containing 54,626 persons, has been made the groundwork of the calculation in the density of the population, without reference to Whitefriars precinct, which is in the City of London District, but included in the area of East and West London.

(*g*) The area stated is exclusive of Mile End New Town, and Holy Trinity, Minories, both in this District, but incorporated with the area of others. The calculation on density, &c. is made on 62,861 persons, occupying 7,725 houses, on an area of 316 acres.

(*h*) Mile End New Town, and All Saints, Poplar, being included in the area of Stepney, the houses and population of those places are added to the total of that district, making 18,543 houses, and 119,354 inhabitants on an area of 2,518 acres; upon which the calculations of density, &c., are made.

(*i*) This area comprises Bow and Bromley only, the remainder of the district (All Saints, Poplar) being incorporated with the area of Stepney; the calculations of density, &c., are therefore made without reference to Poplar Parish, but on a population of 10,780, and 1,931 houses in Bow and Bromley.

(*k*) The area of St Saviour and St. Olave is included with that of St. George, Southwark.

(*l*) This area includes St. Saviour and St. Olave, and the calculations of density, &c., are made with reference to the houses and population of those districts also, making a total of 13,845 houses, and 98,098 persons on the area given.

TABLE E.

MORTALITY in the CITY OF LONDON, without the Walls;
Comprising the districts of East London, and West London.

AGE	Deaths registered in the 7 years 1838—1844	Deaths that would have happened if the mortality had been the same as in Lewisham	Excess of deaths in London without the walls
0— 5	6084	2625	3459
5—10	612	315	297
10—15	175	188	— 13
15—25	572	750	—178
25—35	863	830	33
35—45	1080	724	356
45—55	1122	748	374
55—65	1168	704	464
65—75	1089	680	409
75—85	700	575	125
85—95	151	148	3
95 & upwards	15	10	5
All ages	13631	8297	5334

0— 5	6084	2625	3459
5—25	1359	1253	106
25—65	4233	3006	1227
65 & upwards	1955	1413	542
All ages	13631	8297	5334

TABLE F.

COMPARATIVE TABLE of the Annual Mortality in Marylebone, Brighton and three country districts in the neighbourhood of Brighton.

AGE	Deaths at each age to 1000 Males Living at the same age.			Deaths at each age to 1000 Females Living at the same age		
	Marylebone	East Grinstead, Horsham and Cuckfield	Brighton	Marylebone	East Grinstead, Horsham and Cuckfield	Brighton
0—5	100	42	84	85	34	66
5—10	13	5	11	12	6	12
10—15	4	3	5	5	5	6
15—25	6	7	9	5	9	8
25—35	9	7	13	8	11	9
35—45	17	8	17	12	12	12
45—55	27	11	23	19	13	18
55—65	50	24	39	37	29	29
65—75	85	64	63	74	56	62
75—85	178	146	148	165	133	128
85—95	294	304	364	286	245	391
95 & upwds.	527	424	...	431	213	214
All ages	25	17	25	20	17	19

This Table shows that out of 1000 Males living under 5 years of age, 100 die annually in Marylebone; 84 in Brighton; whilst in a group of three districts (East Grinstead, Horsham, and Cuckfield,) in the neighbourhood of Brighton the deaths amount to only 42: this disparity becomes even more perceptible at other periods of life: for instance, out of 1000 males living at 5 and under 10 years of age, the deaths in Marylebone were 13; in Brighton, 11; and in East Grinstead, &c., 5: at the age of 35 and under 45 the deaths were, in Marylebone, 17; in Brighton, 17; and in East Grinstead &c., 8; whilst at all ages they were, respectively, 25, 25, and 17. It is probable that the mortality amongst the visitors in Brighton is, in proportion, less than that of the resident population: but this admits of direct investigation.

TABLES G.

COMPARATIVE METEOROLOGY OF THE MARCH QUARTERS OF THE YEARS 1845, 1846 & 1847.

Quarters ending	Years	Mean height of the Barometer, from 936 observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS: Highest during the quarter	Lowest during the quarter	Mean: Of the Highest on each day, from 78 observations	Mean: Of the Lowest on each day, from 78 observations	Mean: Difference in degrees	Mean of 936 observations	Dew Point: Mean of 936 results	Self-Registering: Highest in the sun: During the quarter	Highest in the sun: Mean of 91 observations	Lowest on the grass: During the quarter	Lowest on the grass: Mean of 91 observations	In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'clock. MEAN: Of the highest on each day from 91 observations.	MEAN: Of the lowest on each day from 91 observations.	Difference between the dew point temperature and air temperature: Mean of 936 differences	Mean of the greatest on each day, 78 observations	Mean of the least on each day, 78 observations	Difference between the mean temperature of the quarter, and the mean temperature of the same quarter on an average of 25 years	WIND: Pressure in lbs. on the square foot: General direction	Greatest pressure in the quarter	Mean for the quarter	The mean weekly amount of Horizontal movement of the air	Mean amount of Cloud, 0-10	Rain in inches (91 days)
March	1845	29.788	59.0	8.8	40.0	30.9	9.1	35.4	31.7	68.8	49.6	6.0	23.8	37.2	36.4	3.7	7.7	0.8	—3.5	..	13.0	0.6	1046	7.5	4.80
	1846	29.721	59.9	26.7	48.6	39.1	9.5	43.7	39.8	78.5	54.2	15.0	32.4	45.7	43.5	3.9	7.7	1.1	+4.9	..	12.0	0.6	1039	7.6	5.73
	1847	29.846	61.2	12.0	42.6	31.8	10.8	37.2	32.2	89.0	54.7	9.0	25.3	39.1	37.4	6.0	11.2	2.1	—1.6	..	16.5	0.3	828	7.3	2.82

DEATHS in LONDON from all Causes, exclusive of Violent and Sudden Deaths.

Number of Weeks		1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
Winter Quarter	1845	1320	1089	990	976	970	963	1082	1097	1097	1079	1034	1132	1115	13,944
	1846	1038	942	1003	874	878	888	858	907	894	829	874	832	988	11,805
	1847	1391	1358	1250	1202	1119	1082	1114	1215	1007	961	1000	1074	949	14,722
Mean Temperature	1845	37.6	40.3	40.8	39.5	32.4	33.4	29.3	31.1	37.5	29.3	29.1	33.5	47.0	35.4
	1846	40.8	40.8	41.6	48.9	47.7	43.7	36.2	44.1	51.7	47.6	44.2	38.2	42.9	43.7
	1847	29.0	37.3	32.2	32 6	41.7	34.8	25.6	45.7	35.8	37.9	35.7	48.8	46.6	37.2

DEATHS REGISTERED in the Four Quarters of the Eight Years 1839—1846, and March Quarter, 1847, in 117 of the DISTRICTS of ENGLAND and WALES.

	1839	1840	1841	1842	1843	1844	1845	1846	1847
March	42,410	46,376	46,967	44,903	43,748	46,136	49,949	43,850	56,105
June	41,244	42,074	39,133	38,569	40,343	38,977	40,886	43,734	....
September	37,317	39,498	36,058	39,409	36,953	38,933	36,153	51,427	....
December	41,740	44,186	39,292	39,662	42,607	44,081	39,321	53,093	....
TOTAL	162,711	172,134	161,450	162,543	163,651	168,127	166,309	192,104	....

The Mortality of the District of Lewisham, and Sub-district of Hampstead, is included in this Table throughout.

LEWISHAM.—Population 1841, and Deaths Registered in the Lewisham District.

Years of Age	Population enumerated, June 6—7; 1841.		Deaths Registered in the 7 Years 1838—1844.	
	Males	Females	Males	Females
0—5	1317	1344	493	438
5—10	1326	1281	71	60
10—15	1370	1198	31	43
15—25	1786	2672	75	115
25—35	1523	2306	94	110
35—45	1209	1499	87	95
45—55	883	1024	100	109
55—65	561	680	135	115
65—75	303	344	118	148
75—85	79	139	118	127
85—95	9	22	24	50
95 & upwards	,,	2	3	7
Specified Ages.	10366	12511	1349	1417
Not Specified.	106	31	1	1
All Ages....	10472	12542	1350	1418

Extract from the Report of a Commission to inquire as to the existing state of Municipal Corporations in England and Wales, 2nd Report, 1837.

RELATION OF THE CITY OF LONDON TO THE METROPOLIS.

One circumstance of primary importance and difficulty immediately presents itself.

In our First Report, it was represented to Your Majesty that, in most important Towns, the suburbs had extended themselves far beyond the limits of the corporate authority. In London, the most important of all, this is most remarkably the case; so much so, indeed, that the word suburb can no longer be applied with its usual signification to the vast extent of uninterrupted Town which forms the metropolis of the British Empire. It appears by the Reports laid before Parliament previously to the passing of the Act commonly called the English Boundary Act (stat. 2 & 3 Will. 4, ch. 64), that the districts proposed by the framers of those Reports, as the intended Parliamentary Borough of the City of London and the adjacent Metropolitan Boroughs, were, according to the census of 1831, and the returns procured by them, circumstanced as follows, with respect to houses, population and taxation.

	Population.	Houses.	Assessed Taxes.	Persons in 100 Houses.	Assessed Taxes paid by 100 persons.
			£		£
City of London	122,395	17,315	205,476	707	168
Southwark	134,117	22,482	51,262	597	38
Westminster	202,460	21,893	303,421	925	150
Finsbury	224,839	29,605	201,027	759	89
Marylebone	234,294	27,888	282,201	840	120
Lambeth	154,613	29,079	91,069	532	59
Tower Hamlets	302,519	66,777	93,151	453	31
In all	1,375,237	215,039	1,227,607	640	89

(Boundary Reports, Part III. p. 110.)

With respect to the nature of the population, it is well known that, on the one hand, the city contains by far the most active commercial district of the metropolis, and that it forms the northern bank of the highest part of the Thames accessible to large vessels; and, on the other, that it does not contain either the Courts of Law, the Houses of Parliament or Government Offices, or, generally speaking, the residences of the higher or more opulent classes.

The course followed by the Legislature in the Statute 5 & 6 Will. 4. c. 76, (commonly called the Municipal Corporation Reform Act), so far as relates to those towns included within its provisions, was to bring all that would popularly be termed the town within the scope of the same municipal authority. In many of those towns the additions so made were inconsiderable; in others they bore a considerable proportion to the ancient Borough; as, for instance, in the City of Bristol, where the population has been increased by such additions from 59,000 to 104,000, and in the Borough of Liverpool, where it has been raised from 165,000 to 206,000. But in all these cases it was assumed, not only that the nucleus of the town, consisting of the old Municipal Borough, was the most important part of the whole united district, but also that the utmost extension thus given to the limits of the Borough was still not sufficient to overpower and destroy its primary importance in the new community formed by the union of it with all its suburbs.

It appears, from the foregoing statements, that this assumption cannot be made in the case of the metropolis. Nevertheless, we do not find any argument on which the course pursued with regard to other towns could be justified, which would not apply with the same force to London, unless the magnitude of the change in this case should be considered as converting that which would otherwise be only a practical difficulty into an objection of principle.

We have pointed out how small a proportion of the metropolis is comprehended within the Municipal Boundary. We are unable to discover any circumstance justifying the present distinction of this particular district from the rest except that *in fact* it is, and has long been, so distinguished.

We hardly anticipate that it will be suggested, for the purpose of removing the appearance of singularity, that the other quarters of the town should be formed into independent and isolated communities, if indeed the multifarious relations to which their proximity compels them would permit them to be isolated and independent. This plan would, as it seems to us, in getting rid of an anomaly, tend to multiply and perpetuate an evil.

Other topics suggest similar conclusions, as the paving, sewage and lighting of the streets, which, as it seems to us, can never be so economically and efficiently performed in one town as when superintended by an undivided authority; and the only real point for consideration is, how far these duties for the whole Metropolis could be placed in the hands of a Metropolitan Municipality, or how far they should be entrusted to the Officers of Your Majesty's Government. With respect to sewage, indeed, there is an obvious absurdity in placing the City, and any large district which drains into it from a higher level, under different superintendence. The navigation of the river Thames, to which the empire owes so much of its greatness, raises another most important question. In the first place, the inhabitants of every quarter of the Town might reasonably require that the privileges of ownerships and conservancy, as they are called, should not continue to be confined to one district, to which they were granted when it, in fact, constituted the whole metropolis; but, further, it is plain that the proper management of the port and river is not a matter which concerns solely the inhabitants of the Metropolis. The inhabitants of other parts of Your Majesty's dominions have a right to ask whether these functions, the due performance of which is of vital importance to all, are properly within the province of any local Municipality, however extended; and why they should not be under the direct control of the general executive government of the country.

REGISTRARS' NOTES.

The following Instruction was addressed to the 447 Registrars in the Country:—

> "If at any time the number of deaths registered during the Quarter has been *above the average*, state, in a note at the foot of the Return, whether any epidemic disease, such as Measles, Typhus, &c., has been prevailing in the District, or if there be any other known circumstance which will account for the increase."

The Registrars alone must be held responsible for the opinions expressed in any of the subjoined Notes.

SUP. REG. DISTRICT	REG. DISTRICT	
BRIGHTON	*Kemp Town*	Deaths 47. The number is 19 more than in the corresponding quarter last year, and rather more than the average of 3 years. Many occurred at an advanced age.
ISLE OF WIGHT	*Newport*	Deaths 84: being 10 above the average of the season. Aged persons have suffered from the severe and protracted winter. 33 died at 60 and upwards.
PORTSEA ISLAND	*Portsea*	The number of deaths (112) has been above the average, and is 39 more than in the corresponding quarter of the last year. The mortality has been principally among the aged and the very young. No epidemic disease prevailed in the district.
———	*Kingston and Landport*	Deaths 124. The mortality, as in the last quarter, has been principally among the very aged and very young. 47 persons averaged upwards of 77 years each, and died chiefly from bronchitis, while the young died of pneumonia, which professional men attribute to the sudden change in the atmosphere. The district is free from epidemic disease.
WINCHESTER and HURSLEY	*Winchester*	Deaths 100. Pulmonary diseases continue to predominate. Of the deaths returned (being 35 more than in the same quarter last year), 43 are the result of chest affections.
———	*Twyford*	Deaths 29. A considerable increase of deaths this quarter chiefly among children; some having died from measles, which has been very prevalent in this district.
WINDSOR	*Windsor*	Deaths 95. A great increase occurred in January amongst persons of a great age.
ST. ALBANS	*St. Albans*	Deaths 64. Being rather more than the average number. There has been no epidemic disease. The severity of the winter is supposed to have been the cause of the increase.
———	*Harpenden*	The present number (36) shows an increase of 10 on the corresponding quarter of 1846. The severity of the season has been fatal to the aged.
WYCOMBE	*Princes Risborough*	Deaths 58. An unusual amount of mortality, being 20 more than in the corresponding quarter of last year. No particular epidemic has prevailed, nor can the increase be referred to any particular cause.
OXFORD	*Oxford*	Deaths 122. Corresponding quarter of last year 75. The average of 5 corresponding quarters 106. The increase for the quarter just ended was caused by a great mortality among aged people during the month of January.
NORTHAMPTON	*All Saints*	Deaths 83. The severity of the late winter has been unusually trying to the aged and to young children. Nearly one-fourth of the whole number of deaths have been those of persons upwards of 70 years.
BEDFORD	*Cardington*	Deaths 91. The mortality in this district during the last quarter has been above the average, principally in consequence of the continued prevalence during the first half of the quarter, of typhus fever and scarlatina, although considerably lower than in the quarter immediately preceding (141). The diminution in the number of deaths from fever is remarkable during the latter half of the quarter. Five cases only were registered in which the certificate of the cause of death was not presented; but it is to be regretted that, in the great majority of cases, the duration of diseases is not given. It is desirable that some step should be taken to induce the medical attendants to devote that small amount of additional attention which would render their certificates of the cause of death much more valuable.
———	*Turvey*	Deaths 25. This is by far the largest number that has taken place in this district since the commencement of the new registration. 8 cases of influenza occurred among old people and children.
CAMBRIDGE	*St. Andrew the Less*	Deaths 78: exceeding those of last quarter by 25. The excess arises from the great mortality of children and aged persons. No epidemic.
———	*St. Andrew the Great*	Deaths 45: being more than the average. A number of very old people have died. The hooping cough has proved fatal in several cases.
———	*St. Giles*	Deaths 27: somewhat above the average. Pneumonia fatally prevalent during the early part of the quarter, particularly among children of tender age.
IPSWICH	*St. Margaret*	Deaths 60: 18 more than in the corresponding quarter of last year; but no known cause that will account for the increase. 7 persons died aged upwards of 75 years.
GREAT YARMOUTH	*Northern*	The number of deaths is 93, being 5 above those of the corresponding quarter of 1846. The severity of the weather has had its influence on persons advanced in age. The number of deaths of persons at 70 years of age and upwards is 28: half of this number died in January: in February 8; in March 6. No epidemic disease has prevailed during the quarter.

SUP. REG. DISTRICT	REG. DISTRICT	
DEVIZES	*Lavington*	The number of deaths (44) is above the average. The increase is chiefly among the aged. There is no particular disease in the district.
DORCHESTER AND CERNE	*Dorchester*	Deaths 52: which is above the average. Typhus being prevalent.
———	*Piddletown*	The number of deaths (32) is above the average. Typhus fever has been again prevalent; 5 cases having proved fatal.
———	*Maiden Newton*	The number of deaths exceeds the average of corresponding quarters by 19, or in the proportion of about 5 to 3. Out of the total of deaths (51), 21 occurred at upwards of 65 years of age; the principal cause of death was chronic bronchitis: 18 occurred under 4 years of age; the cause of death was chiefly pneumonia, which has been very prevalent among children, terminating fatally in very short periods of time. The greatest increase was in the month of March, in which 23 deaths occurred.
EXETER	*St. David*	Deaths 105. This number is very considerably above the average. There has been no epidemic. The prevailing cause of death has been disease of the respiratory organs, occurring chiefly in March. Deaths in January 34; in February 20; in March 51. 24 persons died above 70, whose ages average 80 years.
———	*St. Sidwell*	Deaths in the quarter 185: the largest number ever registered: exceeding the average of 4 previous corresponding quarters by 47. The column headed cause of death exhibits a remarkable absence of diseases of the zymotic class. The mortality in the workhouse has been excessive. Average number of inmates 396; deaths 31; in the ratio of more than 30 per cent. per annum. Very few of these were between 5 and 60 years, and consequently the average age at death amounts to 42 years and 9 months. 9 were cases of measles, accompanied by low fever and diarrhœa, the latter being also a frequent concomitant of the other fatal diseases in that institution, whilst the remainder of this district, containing a population of about 18,000, gives but 7 deaths from measles, all without this character. The medical officer of that establishment has not been able to connect it with any particular cause. Among the lower class a considerable number of the children have been attended by druggists; and one of these recently gave a certificate that the deceased "was brought to him with inflammation of the chest." Perhaps the diagnosis of no diseases is so obscure, and at the same time so important, as the chest affections of young children. Almost every constitutional disturbance, whether from fever, teething, derangement of the *primæ viæ*, &c. is attended with more or less irritation of the respiratory organs, so as sometimes to baffle the most observant and skilful practitioners; and yet druggists totally ignorant of medical science undertake infantile diseases, and apparently without compunction, continue to encourage the groundless confidence of parents until the time has gone by when better aid might have availed. Should not the coroner's attention be called to such cases in future?
ST. THOMAS	*St. Thomas*	Deaths 50: being above the average, and including an unusual number of cases of affections of the chest and throat.
———	*Exmouth*	Deaths 39: being 22 more than in the last quarter, and 9 or 10 above the usual average. No particular reason can be assigned except that a number of elderly people have died, there being 12 above 70 years of age.
———	*Topsham*	The number of deaths (30) is 6 above that of the corresponding quarter of last year. 17 are of persons above 60 years.
———	*Heavitree*	Deaths 27. Diseases of the respiratory organs were very prevalent; the weather remarkably severe and changeable.
PLYMOUTH	*St. Andrew*	Deaths 171. The mortality is above the average of nine preceding winters; much lower however than that of the last quarter. The excess in this, as in the former, is occasioned by the prevalence of bronchitis and other diseases of the respiratory organs.
———	*Charles the Martyr*	The number of deaths (83) is about the usual average. Disorders affecting the respiratory organs appear to have mostly prevailed, as the numbers registered were of bronchitis 18; phthisis 8; pneumonia 4; croup 1; ulceration of larynx 1.
REDRUTH	*Redruth*	The number of deaths (47) does not exceed the average, and the only circumstance worthy of remark is the death of more than an ordinary number of old persons above the age of 70.
PENZANCE	*Penzance*	Deaths 119: principally among old and young persons.
———	*St. Just*	The deaths (48) are above the average, but without any epidemic disease. They have principally been among very old and young persons. 15 occurred under 1 year and 12 at upwards of 60 years.
BATH	*Lansdown*	Deaths 91: being above the average. The increase is not attributable to the prevalence of epidemics. Pulmonary effections caused more than 2-5ths of the mortality. 25 deaths were of persons aged 70 years and upwards
———	*Walcot*	Deaths 94: being considerably above the average. The total of the corresponding quarter of last year was 51. This increase is due to the continued severity, and sudden changes of the weather. The mortality has been great with the aged, of whom 45 died at 60 and upwards.
———	*The Abbey*	Deaths 108: being 30 more than in the corresponding quarter of last year. Affections of respiratory organs were registered in 52 cases. Two cases of death occurred from cold and starvation (in children) one by wilful murder—the other by neglect. Of the whole deaths 73 occurred in a class of persons living by daily labour. The price of provisions has during the quarter been about a third above the average—and there has been a want of employment.
———	*Lyncombe and Widcombe*	The deaths (110) are above the average, principally owing to the severity of the winter carrying off many aged persons who were troubled with affections of the lungs, and reduced by debility; children have suffered from affections of the air passages and also of the mucous membrane of the bowels in the form of mucous diarrhœa.
———	*Batheaston*	This number (44) is above the average, but from no particular disease. The winter has been very severe, and food scarce and dear.
———	*Tiverton*	Deaths (62) being from 20 to 30 more than in any quarter since the commencement of registration. 13 of the number are of persons from 70 to 91 years of age. No epidemic.

SUP. REG. DISTRICT	REG. DISTRICT	
BRISTOL	*St. Augustine*	Deaths 66: less by 26 than in the same quarter of last year. 32 occurred in January, 18 in February, and 16 in March.
———	*St. James*	Deaths 140. The increase of deaths, on the corresponding quarter of last year, must be attributed principally, to the severity of the weather during the early part of this quarter. There has been no epidemic disease in this district. The children of the poor have suffered much, and mortality has prevailed much amongst them, in consequence of many of the men,—who are very generally masons' labourers, being unemployed in the winter season, when their families become destitute, and the younger children are deprived of proper clothing and support, and consequently more exposed to inflammatory complaints, particularly of the chest.
———	*St. Mary Redcliffe*	The number of deaths 118: is above the average, and 33 above that of the last quarter, not from any prevailing disease, but from an unusual mortality among aged persons.
———	*St. Paul*	The number of deaths (113) is above the average. Pulmonary complaints have been very prevalent.
CLIFTON	*Clifton*	Deaths 117: being above the average, which is caused by an increase of population, and the number of aged persons who have died this quarter, 28 being of the age of 70 years and upwards.
———	*St. Philip and Jacob*	Deaths 169: pneumonia was extremely prevalent among children.
———	*Ashley*	Deaths 58: being 10 above any corresponding quarter. Pneumonia seems mostly to prevail.
STROUD	*Stroud*	Deaths 115: synochus prevailed to a considerable extent, but few deaths occurred. Several deaths have been caused by measles. The aged and children suffered from the severe changes of the weather.
———	*Painswick*	The deaths (38) are considerably above the average; 14 occurred at 70 years of age and upwards.
———	*Horsley*	Deaths 45: being considerably above the average. Bronchitis and pneumonia prevailed in consequence of the continued cold. 27 died under two years, most of them from these causes.
CHELTENHAM	*Cheltenham*	The number of deaths (268) exceeds that of any previous quarter. There has been no epidemic prevalent in the district to which the increase can be attributed. The following table shows the numbers registered in the corresponding quarters of previous years

1838	1839	1840	1841	1842	1843	1844	1845	1846	Average of 9 years.	1847
216	162	189	220	227	194	181	220	175	$198\frac{2}{9}$	268

From this it will be seen that there have been 41 more registered in this quarter than in any previous corresponding quarter, and nearly 68 more than the average of the corresponding quarter of the previous 9 years. 22 were between 70 and 80 years of age, 11 between 80 and 90, two between 90 and 100, and one 105 years.

HEREFORD	*Hereford*	Deaths 84: the long continued cold has produce more inflammatory disease than usual.
WORCESTER	*Worcester, North*	Deaths 97: 14 more than in the last quarter, and 34 more than in the corresponding quarter of last year. The increase may be ascribed to the prevalence of diseases of the respiratory organs, and also to the great mortality in aged persons.
KIDDERMINSTER	*Kidderminster*	Deaths 139: the excess in the number of deaths this quarter is attributable to bronchitis which has prevailed in the more populous parts of the district.
DUDLEY	*Rowley Regis*	Deaths 113: the largest number registered in one quarter since the commencement of the registration. Typhus and other fevers have been very prevalent, and the district has been in a very unhealthy state.
———	*Tipton*	The number of deaths this quarter (192) exceeds that of last quarter by 24, and the corresponding quarter of last year by 42. Deaths from scarlatina, 47. 89 are of children under 2 years of age.
———	*Sedgley*	Deaths 254: being above the average, and 89 more than in the corresponding quarter of 1846. The increase is owing principally to the mortality of young children, occasioned by the following diseases—hooping cough, 17; diarrhœa, 25; inflammation of the lungs, 25; bronchitis, 10; croup, 10; phthisis, 19; and fever, 20.
———	*Dudley*	The mortality is still on the increase, and considerably above the average; 372 have been registered, being 41 more than in the last quarter, and 162 more than in the corresponding quarter of last year. Out of the above, 245 are certified by medical attendants. The diseases most prevalent are as follows:—Convulsions and teething, 65; pneumonia, 44; fever, 40; bronchitis, 27; consumption, 27.
WOLVERHAMPTON and SEISDON	*Wolverhampton, Eastern*	Deaths 267: exceeding those of any former quarter. 75 were without medical attendance
———	*Wolverhampton, Western*	Deaths 114: considerably above the average; 22 occurred at 60 and upwards; and 5(under 5 years.
———	*Bilston*	Deaths 202: being above the average; 17 more than in the last, and 32 above the corresponding quarter of 1846. Scarlatina, and inflammation of the lungs, chest, &c. have prevailed, as in last quarter.
WOLSTANTON and BURSLEM	*Wolstanton*	Deaths 48: being more than in any quarter for the last 12 months, and above one fourth more than in the corresponding quarter of last year, but from no particula disease.
———	*Tunstall*	The mortality is above the average. The Deaths have been 139, and the district is stil unhealthy. No epidemics prevail to account for the increase.

SUP. REG. DISTRICT	REG. DISTRICT	
WOLSTANTON AND BURSLEM	*Burslem*	Deaths 139: being 20 above the average of the last five corresponding quarters. In one instance (a child of 2 years old) the medical attendant certified that the cause of death was "fever, cold, and want."
BIRMINGHAM	*St. George*	Deaths 216; being 35 more than in the corresponding quarter of last year. 19 were caused by bronchitis, 17 by phthisis, 13 by pneumonia, 7 by hooping cough, and 2 by typhus fever.
———	*St. Mary*	The number of deaths (245) is less than in the last quarter by 18, but considerably above the average. The chief causes were pneumonia, bronchitis, and phthisis.
———	*St. Paul*	Deaths 76: there appears to be a slight improvement in the health of this district during the last quarter. The deaths are about five above the average of nine years. Diseases of the chest and lungs are still prevalent. Phthisis was fatal in 10 cases, hooping cough in 9, bronchitis in 7, pneumonia in 2, tabes in 5, fever in 4.
———	*St. Martin*	The number of deaths (130) is still above the average, there being an increase of 37 over the corresponding quarter of last year, but less than in the preceding quarter by 18. Bronchitis caused 15 deaths, phthisis 13, pneumonia 11, pertussis 11, diarrhœa 7 and typhus 3.
———	*Lady Wood*	The deaths (114) are 12 more than in the last quarter, and 37 more than in the corresponding quarter of last year, arising chiefly from the increase of population in the district.
ASTON	*Erdington*	The number of deaths (45) is above the average. The majority are of children and persons of very advanced age.
COVENTRY	*Holy Trinity*	Of the 81 deaths, 33 occurred at 1 year and under, although there has not prevailed any epidemic or disease in particular, from which to account for so great a mortality amongst infants, the greater part of whom died without medical attendance.
LEICESTER	*East Leicester*	The number of deaths (289) shows an increase of 28 on the preceding quarter, and an increase of 76 on the corresponding quarter of 1846, and that in the absence of any epidemic. The increase is owing to the severe and sudden changes of the weather, producing inflammation of the respiratory organs. Asthma has been very fatal amongst the aged, and from consumption the deaths are 41. The number of deaths from inflammation of the lungs and chest, of infants under 3 years, is 57.
LINCOLN	*Lincoln*	Deaths 109: a considerable increase. The mortality has been the greatest, and much greater in proportion than usual, among the very young and the very old. There have been 25 deaths under 1 year of age, and 33 above 70 years.
———	*South West*	Deaths 77: typhus has been more prevalent this quarter, and out of 77 deaths registered, 35 were at upwards of 50 years of age.
———	*North East*	Deaths 66: this return shows an increase of deaths, compared with the corresponding quarter for last year, arising not from any epidemic, but from the severity of the weather. Work has been abundant in this district, and wages tolerably good.
NOTTINGHAM	*St. Ann*	Deaths 124: an increase of 50 over the corresponding quarter of last year, arising from the prevalence of pneumonia and bronchitis—these two maladies having carried off 42, chiefly infants. As a set-off to this excess of infantile mortality, 18 exceeded the period allotted to man, namely, threescore years and ten.
BASFORD	*Arnold*	The number of deaths (64) is 13 above the preceding quarter. The increase has been principally amongst the aged and the young. Measles has been rather prevalent—4 deaths have occurred from it.
———	*Bulwell*	Deaths 81: this return shows a very large increase—more than double what they usually are. This has been caused chiefly by the prevalence of consumption, measles, and pneumonia. Out of the 81 deaths 61 occurred under 15 years of age. Much of the sickness that has prevailed is to be attributed to the scarcity and dearness of provisions, and, in some cases, to the reluctance of persons to obtain the medical relief parochially provided for them.
———	*Ilkeston*	The number of deaths (114) is double the average, owing to the prevalence of measles, hooping cough, and typhus. There have been 32 fatal cases of measles, in many of which the disease has been marked by typhoid symptoms. In some cases measles and hooping cough have succeeded each other, and 7 fatal cases of hooping cough, uncombined with other ailments, have been registered.
———	*Greasley*	The number of deaths (108) exceeds by 30 the number registered in the preceding quarter, and by 38 those registered in the corresponding quarter of 1846. The increase is attributable to typhus, measles, and pneumonia. Typhus has prevailed to a very great extent and has proved fatal in 19 cases, principally owing to its frequent complications with affections of the lungs and bowels. The great frequency of these complications and the fatal extent to which they so often proceed in spite of all treatment, may doubtless be attributed in a great measure to the very imperfect protection which the dwellings, clothing, and other accommodations of the poor afford from cold and other injurious influences. 12 deaths have taken place from measles which has been epidemic; pneumonia, which has been nearly altogether confined to young children, has proved fatal in 10 instances.
———	*Basford*	The number of deaths (100) is considerably above the average, and 38 more than in the corresponding quarter of last year. There have been 16 fatal cases of measles, which is partly the cause of the increase.
STOCKPORT	*Stockport (First)*	The number of deaths (245) has exceeded that of the corresponding quarter of the year 1846 by 29, and that of 1845 by 7. Of the above number, 55 have not been attended by any legally qualified practitioner, (being principally of old people and young children) which is fewer than in any previous quarter, in proportion to the number registered—69 persons have died under 2 years of age—chronic bronchitis has been very prevalent this quarter—dysentery has proved fatal in many cases, brought on by cold and exposure from insufficient clothing, particularly amongst the Irish.
———	*Stockport (Second)*	The number of deaths (80) is 7 less than in the corresponding quarter of 1846, and 65 less than in the quarter ending December 31st, 1846.
———	*Hyde*	Deaths (127): being above the average. Scarlatina prevalent.

SUP. REG. DISTRICT	REG. DISTRICT	
STOCKPORT	*Heaton Norris*	Deaths 100: being 5 per cent less than in the last 3 corresponding quarters, notwithstanding the prevalence of easterly winds in March. Much fever has prevailed, yet few cases have been fatal. 84 out of the 100 have been medically attended. Thanks are due to medical men for promptitude in giving certificates.
———	*Cheadle*	Deaths 34: being the greatest number ever registered in one quarter for this district: in the corresponding quarter of 1846 there were only registered 7 deaths. They have been principally among infants and very old people. 5 out of 6 deaths of infants under 1 month had no medical attendant. The district generally has been healthy. The severity of the season I think has had a great effect upon old people.
MACCLESFIELD	*East*	Deaths 112: being above the general average—the deaths from marasmus, pneumonia, and measles have been numerous,—the two latter diseases together with scarlatina, hooping cough, and cynanche tonsillaris are still prevalent.
———	*West*	The number of deaths (165) exceeds that of the last quarter by 45, and is greater than has been registered since the act came into operation. The complaints most prevalent have been consumption, bronchitis, asthma, and pneumonia, with a few cases of hooping cough, typhus, and scarlatina.
———	*Sutton*	The number of deaths (85) is much above the average. The increase has been amongst aged people. No epidemic to account for the increase; perhaps it is owing in part to the high price of provisions, the scarcity of employment, and the severity of the winter.
———	*Bollington*	The number of deaths (82) is much above the average. 38 were of young children, the remainder chiefly were of old people,
———	*Prestbury*	Deaths 35: the mortality exceeds that of any quarter previously returned, being 52.17 per cent. above the general average. The increase is caused by scarlet fever and typhus fever—those diseases having been very prevalent, particularly amongst the young; and there is no doubt that the severe weather has had a very serious effect upon the aged. One person is stated to have died at the age of 105 years.
———	*Alderley*	The number of deaths (29) is above double the average, which must be owing to the severity of the winter. Inflammation both in children and adults has been prevalent throughout the district.
GREAT BOUGHTON	*Cathedral Division*	This has been a very unhealthy period, the number of deaths being this quarter, 174—corresponding quarter, 1846, 108—increase, 66. The increase, as compared with the quarter ended at 31st December last, is 27. The increase cannot be ascribed to any particular epidemic, though there have been several deaths from fever (15), and that disease is still very prevalent, though not generally fatal.
LIVERPOOL	*Saint Martin*	Deaths 520: being above the average. Typhus, diarrhœa, and dysentery, are still prevalent in the district.
———	*Great Howard Street*	Deaths 628: this return shows a very great increase in the mortality of this district, which is, without doubt, solely attributable to the many thousands of Irish paupers who have landed here within the last three months, bringing with them a malignant fever, which is here very properly called "the Irish fever;" and many hundreds of them were suffering from diarrhœa and dysentery when they arrived, which will account for so many deaths from those causes. Every thing which humanity could devise and money carry out for their cases has been adopted by the Select Vestry; but so many thousands of Irish are continually pouring in, and their habits so disgustingly filthy, that little can be done as yet to stay the great mortality amongst them. Perhaps there is not a parallel case to Liverpool for the last two months in the history of the country. The sanatory statistics of this district must not be taken as any criterion of the health of the native population. Indeed, Liverpool for years has borne a bad character, which is owing to the continued and increasing immigration of the poor and destitute Irish, many of whom, from the change of food, die of dysentery.
———	*Dale Street*	Deaths 580: there is an increase of 183 deaths in this district above the preceding quarter, ending 31st December, 1846, principally owing to the great influx of Irish poor into Liverpool during this quarter, numbers of whom have been in the town but a few days previous to their death. There were registered 112 deaths in one street, called Lace Street. The principal causes of death are as follow—diarrhœa, 72; convulsions, 71; bronchitis, 60; pneumonia, 36; fever, 38; phthisis, 22; measles, 20; small pox, 19. Dysentery has also carried off a number of persons.
———	*St. Thomas*	Deaths 362: the returns this quarter are considerably above the average, owing to the great influx of Irish emigrants, some of whom have arrived in a sickly state, and died in a few days afterwards. The principal causes of death have been phthisis, 40; bronchitis, &c., 76; diarrhœa, &c., 62; fever, 28; measles, 6; small pox, 5. The last three complaints are now prevalent in the district.
———	*Mount Pleasant*	Deaths 508; including 267 at the Workhouse, and 31 at the Infirmary, being 25 more than in last quarter, and 154 more than in the corresponding quarter of 1846. There were 33 fatal cases of phthisis, 36 of dysentery, 54 of fever, and 15 of bronchitis, in the Workhouse. There has been a greater mortality in the Workhouse this quarter than in the whole of this district besides, which must be attributed to the great number of Irish paupers arriving in Liverpool. The other portion of the district is healthy.
———	*Islington*	Deaths 294: there is an increase of 37 as compared with the corresponding quarter of 1846, arising principally from phthisis and fever.
———	*St. George*	The number of deaths (176) is above any corresponding quarter of former years, and exceeds the last quarter by 7. Phthisis caused 33 deaths; bronchitis and asthma, 30; hydrocephalus, convulsions, and debility from birth, 24; pneumonia, 16; bowel disease, 12; fever, 12; and small pox, 8.
WEST DERBY	*West Derby*	Deaths 172: this district appears tolerably healthy at present; the return for the past quarter exhibits a decrease of 67 in the number of deaths.
———	*Toxteth Park*	The number of deaths (396) shows a decrease of 125, compared with the last quarter, December 1846, and is below the average. The prevailing diseases have been typhus, diarrhœa, and dysentery. Typhus, 10; diarrhœa, 24; and dysentery, 8.
BLACKBURN	*Blackburn*	The deaths this quarter (415) are above the average—scarlatina and typhus still prevailing.

SUP. REG. DISTRICT	REG. DISTRICT	
BLACKBURN	*Mellor*	Deaths 30: being above the average. Scarlatina has prevailed very much, one-half of the deaths having been from that disease.
———	*Darwen*	Deaths 152: the greatest number that has been registered in this district. Scarlatina still rages in some parts of the district.
———	*Witton*	The number (58) of deaths has been more than double the average. The excess has been caused by scarlatina maligna.
PRESTON	*Preston*	Deaths 635: being 199 above the corresponding quarter of last year, and 21 above the average of the 10 corresponding quarters. Scarlatina and typhus prevailed for the first 6 weeks. 91 deaths were from consumption, 60 from bronchitis, and 51 from old age. No particular complaint prevails at the present time.
———	*Broughton*	Number of deaths (38) is above the average. The increase is owing to scarlatina and typhus.
———	*Alston*	Deaths 42: this is above the average. Scarlatina has prevailed, and still continues.
———	*Walton-le-dale*	The deaths registered this quarter are 60, the average for the March quarters being 54. Scarlatina has prevailed in this as well as last quarter, and has proved fatal in 18 cases.
BURY	*Elton*	Deaths 110; this is more than double the average. A great many fatal cases have occurred from measles, scarlatina, and pneumonia. The increase generally has been caused by a severe winter, and an insufficiency of food and other necessaries.
———	*Tottington, Lower End*	Deaths 49. The alarming increase is almost solely attributable to scarlatina, measles, hooping cough, and typhus, which are still prevailing with great fatality amongst children in the district.
BOLTON	*Eastern*	Deaths 245: the largest number registered in any quarter since the Registration Act came into operation. It is 5 more than the number registered in the last quarter, and 45 more than in the corresponding quarter of last year. The immense number of sick Irish immigrants who have been admitted into the workhouse, and died there, may account for a portion of this increase. Measles, typhus fever, hooping cough, and diarrhœa, have been very prevalent.
———	*Western*	The number of deaths (175) is above the average, owing to an increase of fatal cases of bronchitis and pneumonia.
———	*Little*	The number of deaths (147) is more than one-fourth less than the preceding quarter, and one-sixth more than the corresponding quarter of last year. This district is not at present free from epidemics. There were 14 fatal cases of scarlatina, and 7 of fever. The severity of the weather, and the extremely high price of provisions, have caused such a severe pressure upon the working classes, as to prevent them from obtaining any thing like a sufficiency of food, which, with the absence of other comforts, has operated materially in promoting epidemics and other diseases.
———	*Sharples*	Deaths 43. The district has been very unhealthy for 6 months, the mortality being nearly double the average. Scarlatina, measles, &c., have prevailed.
———	*Little Hulton*	Deaths 45: exceeding the average by 15; principally among children and old people.
———	*Lever*	Deaths 50: more than the average by about 15. The winter has been very severe, and all kinds of provisions very high, which may account for some of the increase.
———	*Tong with Haulgh*	Deaths 64. This is an unprecedented number: it is above double the average, and exceeds by 35 the corresponding quarter of last year. This fearful increase mainly arises from 18 cases of scarlatina, 7 of measles, and 5 of inflammation, all amongst children, except one.
WIGAN	*Wigan*	The number of deaths (290), although not so great as in the three quarters preceding, is still 50 per cent. above the average. The medical certificates have effected much good in this district, for, during the past year, 270 died without any medical attendant whatever, while only 39 have died during the last quarter without being more or less attended. Owing in some degree to the severe winter, 8 cases are registered from pneumonia, 35 from phthisis, and 40 from asthma or bronchitis.
———	*Standish*	The number of deaths (59) is considerably above the average. The corresponding quarters of 1843, 1844, 1845, 1846, are respectively as follows—32, 49, 37, 32. The prevailing epidemic has been scarlatina, confined to children, of whom 10 have died.
———	*Ashton in Makerfield*	Deaths 54: about one-third above the quarterly average, 21 more than in the corresponding quarter of 1846. 9 deaths from scarlatina.
———	*Upholland*	Deaths registered 44; being 7 per cent. above the quarter's average. No cause can be assigned; unless it be the severity of the winter.
PRESCOT	*Rainford*	Deaths 11: exceeding those of all the corresponding quarters, except of 1838 & 1840. Scarlatina maligna prevailed, and was fatal to infants.
———	*St. Helen's*	Deaths 218: this is 115 above the corresponding quarter of last year, though 43 less than last quarter. Scarlatina has proved fatal to 40, pneumonia to 14, typhus to 11, and diarrhæa to 5.
———	*Prescot*	Deaths 153: 13 more than double the average. No particular epidemic prevailed in the district. 16 died of measles, 11 of typhus fever, 11 of asthma and bronchitis. The principal part of those who have died of typhus are the poor Irish, who have recently come over from Ireland.
———	*Farnworth*	The number of deaths (38) is a little more than double the average. The chief mortality has been among old persons and children. Of the latter, 7 have died of scarlatina, and 8 of pneumonia.
———	*Much Woolton*	Deaths 35. This number is 5 less than in the preceding quarter, but is much more than the average. The majority of deaths registered have been caused by fever, dysentery, asthma, pneumonia, bronchitis, and old age.

SUP. REG. DISTRICT	REG. DISTRICT	
CHORLTON	*Chorlton upon Medlock*	Deaths 200: a diminution of 66 on the previous quarter, showing that the health of this district is highly satisfactory. Small-pox has been exceedingly rife, four cases proving fatal, two after vaccination. With this exception, the diseases prevailing have been of an ordinary character.
———	*Hulme*	Deaths 310. The excess (32) over the corresponding quarter of last year does not appear to have arisen from the prevalence of any particular epidemic, or from the depressed state of trade and consequent general distress, but may be attributable to increase of population in the district, which is considered by the medical men generally to be in a healthy state. No doubt some deaths have been hastened by the want of sufficient nourishment, and the comforts, even the necessaries of life. Nevertheless, much disease has been prevented, and perhaps life spared, from the want of pecuniary means to indulge in intemperance and dissipation.
———	*Barton upon Irwell*	Deaths 81: being above the average, owing to measles having been very prevalent.
MANCHESTER	*St. George*	Deaths 399. The number of deaths registered in this district during the last three quarters exhibits a most alarming increase of mortality. The following table will show the increase in each quarter over the corresponding quarter last year.

				Increase.
Quarter ending Sept. 30, 1845,	229.	Quarter ending Sept. 30, 1846,	389	160
,, Dec. 31, 1845,	197.	,, Dec. 31, 1846,	406	209
,, Mar. 31, 1846,	234.	,, Mar. 31, 1847,	399	165
			Total increase.....	534

This increase is much greater than in any corresponding period since the passing of the Registration Act. In a former report, the great increase of mortality during the quarters ending 30th Sept. and 31st Dec. 1846, was attributed to the prevalence of fever and measles, aggravated by the unhealthy abodes of vast numbers of the population of the district. The principal causes of death during the present quarter may be thus classed:—measles, 60; consumption, 45; bronchitis (acute and chronic), 34; pneumonia, 29; asthma, 21; diarrhœa, 20; marasmus, 20; fever, 11. From the peculiarity of the district, fever and other epidemics are rendered more fatal than in most others; the poor dwelling in narrow streets and damp cellars, where scarcely a breeze of fresh air visits them, and being so densely crowded, it cannot be matter of surprise that the ravages of death are so fearful. The Registrar had occasion personally to inspect some of their dwellings. One cellar consisted of two compartments, each measuring 4 yards by 4. In the first, the family of the house consisted of 7 persons; in the other, the back apartment, were no less than 20 persons, 12 adults and 7 children, and in the corner, the dead body of the child he had come to visit. In the last report he stated something of the over-crowded state of the low lodging houses; but he had no idea of the real extent of the evil till he had witnessed it. The mortality among the Irish poor has been greater this quarter than last, many of them dying after a few days residence, not from organic or old chronic complaints, but in very many instances from extreme debility, produced, no doubt, by the want of sufficient food, and exposure to the dangerous influences of the low lodging houses to which they are compelled to resort. The population of the St. George's district, according to the last census of 1841, was 31,568 persons, inhabiting 4884 houses, showing an average of about 6½ persons to each house. The enumeration returns show that the houses in the Angel Meadow section were then overcrowded. What must be the case now, when there is taken into account the natural increase of the population and the immense influx of Irish poor, while the accommodation as to residence has continued in its former inadequate state?

———	*Market Street*	The number of deaths is 528: being 208 more than in the corresponding quarter of 1846. Of this large number of deaths, 259 have taken place in the workhouse, the number of inmates in which is much higher, than at any former period; the lowest number during the quarter being 1617, the highest 2663, in the week ending March 18, and the average number for the whole quarter 2056 persons. The average number of inmates in the workhouse for the corresponding quarter of 1846 was only 1274. It will appear, however, that though the increase of poor in the union workhouse has not been quite 62 per cent., the increase of mortality has been rather more than 2½ times as great as that of the winter quarter of 1846, when only 101 deaths were registered. This great excess is attributable to the operation of several causes, but in particular to the unusually severe and protracted winter, the dearth of employment, and the high price of provisions. It may be observed also, that the vast influx of Irish families into the town in a state of utter destitution, has added much to the amount of disease, and swelled considerably the rate of mortality, and obliged the board of guardians to hire additional premises in Tib-street for the accommodation of the destitute poor. The number of deaths registered in the Royal Infirmary during the quarter has been 61.
———	*London Road*	Deaths 279: this number falls short of the deaths registered in the preceding quarter (December 1846) by 83. It is more than the average of the March quarters for 1843, 1844, 1846, by 46; but it falls short of the entries in March 1845 by 45.
———	*Deansgate*	The present number (314) is considerably higher than the average, but is much below that of last quarter. The infant mortality was as follows—under 12 months, 59; between 1 & 2 years, 36; 2 & 3, 23; 3 & 4, 10; 4 & 5, 9—Total, 137.
SALFORD	*Regent Road*	Deaths 182: about 12 per cent. above the average.
ASHTON and OLDHAM	*Ashton Town*	Deaths 216: above the average of the corresponding quarters. The mortality under 5 years has been below the usual proportion. The increase seems in the diseases of the respiratory organs.
———	*Andenshaw and Droylsden*	The number of deaths (78) is considerably more than in the corresponding quarters of past years and is principally among the very young and aged. No epidemic prevails at present.
———	*Dukinfield*	Deaths 208; 23 more than in the corresponding quarter of 1846; the prevailing diseases have been measles, scarlatina, pulmonic affections, &c.
———	*Newton and Godley*	The number of deaths (78) is considerably above the average. Scarlatina, pneumonia, and measles, continue very prevalent.
———	*Stayley*	Deaths 40; being above the average of corresponding quarters, owing to measles, scarlatina, consumption, and dropsy, being prevalent in the district.
———	*Oldham above Town*	Deaths 222: rather below the average; of these, however, 47 are from the prevailing epidemic, scarlet fever.

SUP. REG. DISTRICT.	REG. DISTRICT	
ASHTON and OLDHAM	*Royton*	Deaths 53: about the average. Fever of a typhoid character, scarlatina, and inflammatory affections of the throat, have been the most prevalent disorders.
SHEFFIELD	*Park*	Deaths 100: the average of this quarter for the last 9 years is 85. 63 were under years of age. 17 cases are of fever (chiefly typhoid). Of other diseases, a majority are such as prevail at this season of the year, connected with the respiratory organs. The greatest number of deaths ever registered in one year was in the year ending June 30, 1839—351; but there have been already registered since July 1, 1846—370.
———	*Brightside*	Deaths 72. There has been a great decrease of deaths compared with the three quarters immediately preceding, though still above the average, fever prevailing to a considerable extent.
HUDDERSFIELD	*Huddersfield*	The number of deaths (256) is considerably above the average, no epidemic disease being very prevalent. The excess has been among children and old people.
———	*Almondbury*	Deaths 92: exceeding those of the corresponding quarter of 1846 by 41. Scarlatina still prevails.
———	*Kirkheaton*	At no former period have there been so many deaths as during this quarter, the number (114) being fully one-third above the general average. 54 of these deaths were of children under 10 years of age, and 13 of persons above the age of 70 years. The prevailing diseases were scarlatina, measles, hooping cough, typhus, bronchitis, pneumonia, and other inflammations. 76 of the deaths were not certified.
———	*Kirkburton*	Deaths 92: being 9 less than in the last quarter, and 35 more than in the corresponding quarter of last year. 49 children died at 1 year of age and under.
———	*Newmill*	The number of deaths (47) is considerably above the average, being 18 more than in the corresponding quarter of last year. Pneumonia has been prevalent.
———	*Holmfirth*	The number of deaths (82) is considerably above the average. Typhus fever and hooping cough have prevailed through the quarter.
———	*Honley*	Deaths 71. Typhus, which prevailed for nearly 6 months in this district, has, during the last quarter, very considerably abated, there having been not more than 4 or 5 cases. Yet without any epidemic, the number of deaths far exceeds that of any preceding quarter, being about 20 more than in the same quarters of 1845 and 1846. Out of 71 cases, 23 had no medical attendance.
———	*Meltham*	Deaths 57: being 90 per cent. above the average. Typhus, scarlatina, and hooping cough, have been prevalent, which, with 19 deaths of children under 1 year old, have tended materially to augment the number of deaths, which exceeds that of any previous quarter since the Registration Act came into operation.
———	*Lockwood*	Deaths 62: exceeding by 5 the large increase of the last quarter. In the quarter ending December, 1846, a great deal of fever, such as typhus, scarlatina, &c., prevailed in this district; it continued with great virulence in some families during the succeeding months of January and February, and proved fatal in 14 cases; since then it has in a great measure subsided. Testimony should be borne to the general willingness and attention of the medical gentlemen of this district in furnishing certificates of the causes of death; out of 62, 45 are certified; 5 were without any medical attendant.
———	*Slaithwaite*	Deaths 52: 10 above the average. Typhus fever and pneumonia in old people will account for the increase.
———	*Golcar*	The number of deaths (81) in this quarter is above the average, and exceeds that of the corresponding quarter last year by 31. No particular disease.
HALIFAX	*Elland*	Deaths 115: considerably above double the average of deaths. The greatest fatality has been with children under 2 years. Scarlatina caused 14 deaths, and typhus 3; which diseases have an entirely endemic character, and been confined to the *highest parts* of the district. It is worthy of observation, that whilst the number of deaths increased considerably towards the close of last autumn, these were found to occur chiefly in the lower part of the district, which has only the natural drainage which the open nature of soil situated on the first series of the "Millstone Grit" affords, but which is, at the same time, lamentably deficient in a *due supply of water*, to carry off the refuse from the buildings, as the only resource for this purpose is rain water. Owing to the protracted drought and excessive heat of last summer, these evils were greatly aggravated; and, in consequence, large accumulations of animal and vegetable matter were lodged in the soil, in the immediate neighbourhood of a large population, who were the first to suffer from the volatile poison thereby eliminated. The evil, however, does not seem to stop here. Though this part of the district has had for two months an average healthiness, the higher and more remote parts have suffered severely from the epidemics before alluded to.
———	*Southowram*	Deaths 49: being above the average, and 7 more than in the corresponding quarter of last year. Many children have been carried off.
———	*Brighouse*	Deaths 62: this quarter's return contains 5 deaths from typhus fever; 3 in one house, viz., of mother, son, and daughter; and 2 in another, viz., of husband and wife. The localities of both are the most elevated and airy in the district.
———	*Rastrick*	Deaths 31; being 11 more than in the quarter ending December last, but only about 8 more than the general average. The greatest mortality has been amongst children from dentition, croup, and pneumonia; and amongst adults, from phthisis, asthma, and old age.
———	*Rippondon*	Deaths 47: the number of deaths this quarter is above the average, but not from the prevalence of any epidemic. Great neglect in obtaining medical aid exists, as 21 of the above number of cases of death have had no medical attendant.
———	*Northowram*	Deaths 125: which is above the average, but from no particular disease. An unusual number of children under 2 years have died.
BRADFORD	*East*	Deaths 197: being above the average, from the severity of the winter and the extreme price of provisions. Number of deaths certified, 129; not certified, 68.
———	*West*	Deaths 170: an increase of mortality among old and young persons.

SUP. REG. DISTRICT	REG. DISTRICT	
BRADFORD	*Idle*	Deaths 80: above the average, and 26 above the corresponding quarter of last year This is not owing to any particular epidemic, the diseases being as various as usual though pneumonia and diseases of the respiratory organs have been most prevalent That the cause of this increase is the severe cold which has prevailed during the late winter, and the latter part of the preceding autumn, is strikingly manifest from the difference of temperature which prevailed in this and the preceding winter, compared with the number of deaths in each. The effect has been aggravated, perhaps, in many cases, by the want of an increased supply of food and clothing. Many aged persons have fallen in this quarter, and one who had braved the storms of a hundred years.
———	*Manningham*	Deaths 89: this number is greater than in any preceding quarter; many children have died of pneumonia and hooping cough. There has been much fever among the adult population, and the long and severe winter seems to have affected the aged; for a much greater number than usual have died of old age.
———	*Thornton*	The present number (122) is double the average, and the increase is again, like the two preceding quarters, principally attributable to the prevalence of scarlatina and pneumonitis. 67, or upwards of one-half, had no medical attendant.
———	*Wilsden*	The present number (45) is the largest registered in any quarter since the commencement of the Registration Act. The increase is partly owing to scarlatina, typhus, and croup.
———	*Horton*	Deaths 184: an increase of about 52 over last quarter. 45 died of consumption, inflammation of the lungs, and inflammation of the air tubes.
LEEDS	*North*	Deaths 378. The number of deaths is considerably more than in the corresponding quarter of last year. 218 children died at five years and under. Scarlatina, typhus, and pneumonia were very prevalent and fatal. The district is at present in a very unhealthy state.
———	*West*	The number of deaths (310) is 55 more than in the quarter ending December 1846, and 120 more than in the corresponding quarter of last year. Scarlatina, pneumonia, and bronchitis, have been very fatal.
HUNSLET	*Hunslet*	Deaths 130: this is above the average. Scarlatina and typhus have prevailed, and the severity of the weather has been fatal to aged persons.
———	*Holbeck*	Deaths 148: hooping cough and affections of the respiratory organs have been very prevalent.
———	*Wortley*	Deaths 125: being an increase of 35 on the average of the quarter. No particular reason is assignable for the said increase, except it be the severity of the season.
———	*Whitkirk*	Deaths 37: quarterly average is 16. The excess is caused by scarlatina, 15 children having been taken off by that disease.
YORK	*Walmgate*	Deaths 128, being above the average. The severe winter has been fatal to a large proportion of aged people. Diseases of the lungs have been most prevalent. A few cases of typhus.
———	*Escrick*	Deaths 21, being the largest number ever registered during one quarter. Typhus and scarlet fevers have been prevalent in some parts of the district, but not very fatal.
GATESHEAD	*Gateshead*	Deaths 178, being 44 above the average. 33 from scarlatina.
———	*Heworth*	Deaths 63: above the average, but considerably below the last two quarters. 9 deaths from scarlatina, two from typhus. Many old people died during the quarter.
TYNEMOUTH	*Tynemouth*	Deaths 109: being about the average. The causes of deaths include infants and children under 6 years (of whom there are 52) have been chiefly scarlatina, hooping cough, pneumonitis, bronchitis, and tabes mesenterica. The deaths include many of great age, the eldest of whom (a widow) had attained her 100th year.
———	*North Shields*	Deaths 118: the mortality continues above the average. Scarlatina is still prevalent, and fatal to infants.
———	*Earsden*	Deaths 47: 17 of children from scarlatina.
———	*Blyth*	Deaths 38. One third has occurred from scarlatina, which still prevails.
———	*Wallsend*	Deaths 45: being 25 more than in the corresponding quarter of last year. The increase is from the prevalence of scarlet, typhus, and puerperal fevers. Several aged persons have likewise died.
NEWCASTLE-UPON-TYNE	*St. Nicholas*	Deaths 169: being one-fifth less than were registered last quarter. This diminution may be attributed to the almost entire departure of the scarlet and typhus fevers, and also to the demolition of a large number of dilapidated dwellings, and the consequent removal of the poor occupants to better lighted and ventilated houses in other parts of the district. The number of persons who have not had the benefit of medical attendance during their last illness is 24. This is a large number, since the facilities for obtaining medical assistance are so amply provided by an excellent infirmary, fever and other hospitals contained in the district.
———	*All Saints*	Deaths 165. Scarlatina, which raged so awfully during the greatest part of last quarter, rapidly ceased after the severe frost and snow in December, and bronchitis succeeded to a great extent. The district is not yet clear, either of scarlatina or hooping cough; but there is not a great number of cases of either disease which end fatally.
———	*St. Andrew*	Deaths 102: much greater than the average of corresponding quarters; but no epidemic prevails to any extent.
CARLISLE	*St. Cuthbert*	The number of deaths (134) is considerably above the average, being 29 more than in last quarter, and 52 more than in the corresponding quarter of last year. 12 cases occurred from scarlatina, and 8 from typhus. Measles is very prevalent, but not fatal. 65 were under 5 years, and 33 averaged 71 years.
———	*Stanwix*	The number of deaths (30) considerably exceeds the average: 6 were from scarlatina. Many of the aged have died.
———	*Burgh*	Deaths 18. The parish of Burgh-by-Sands (part of this district), with a population o 1000, has for this quarter the unprecedented number of 15 deaths; but 11 of thos are from scarlatina, which accounts for the extraordinary increase of mortality.

SUP. REG. DISTRICT	REG. DISTRICT	
CARLISLE	*Wetherall*	Deaths 26: above the average number. Scarlatina is still prevalent, and has proved fatal in 7 cases.
COCKERMOUTH	*Cockermouth*	This number (76) is above the average. There has been a great deal of sickness among the lower classes. Scarlatina and typhus have been prevalent in part of the district.
———	*Workington*	Deaths 90: above the average; chiefly from measles and scarlet fever.
———	*Maryport*	The number of deaths is 89: being considerably above the average. Scarlatina and measles prevailing.
KENDAL	*Kendal*	Deaths 119. At the commencement of last quarter a great deal of typhus fever remained. Since then, scarlatina has made its appearance: some cases have been of the virulent sort. The deaths from typhus have been 7; phthisis, 20; scarlatina, 18.
———	*Ambleside*	Deaths 40: being above the average. Typhus has been prevalent; but only two cases have proved fatal. 11 very old persons died.
———	*Grayrigg*	The highest number (40) ever registered. Typhus and scarlatina have been very prevalent. There have been 8 deaths from the former, and 10 from the latter.
ABERGAVENNY	*Abergavenny*	Deaths 61: being above the average. The deaths have fallen principally on the young and the aged. 6 died this quarter, whose total ages amounted to 547 years.
MERTHYR TYDFIL	*Merthyr Tydfil Lower*	Deaths 185: far beyond the usual number, owing chiefly to the inclemency of the weather. 25 are from fever, but only a few cases of typhus; in fact, the virulent contagious typhus is scarcely known here; which may be accounted for from the abundance of fuel, precluding the necessity of closing apertures as is done too often.
WREXHAM	*Wrexham*	The number of deaths (136) is above the average. Measles, hooping cough, pneumonia, diarrhœa, and scarlatina, having been very prevalent nearly the whole period.
ANGLESEY	*Llandyfrydog*	Deaths 29. Ten persons averaged more than 84 years: one reached 100.

QUARTERLY METEOROLOGICAL TABLE,

Compiled from the Weekly Tables furnished to the Registrar General by the Astronomer Royal.

Deaths registered in London from Small Pox, Measles, Scarlatina, Hooping Cough, Typhus, Diarrhœa, Dysentery and Cholera, Influenza, Consumption, and other diseases of the Lungs; the numbers at each age, and the total deaths ‡ (except violent and sudden) in each of the 13 weeks ending March 27, 1847.*

1847 Week ending	Phases of the Moon	Mean height of the Barometer, from 2 observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS: Highest during the week	Lowest during the week	Mean: Of the Highest on each day, from 6 observations	Mean: Of the Lowest on each day, from 6 observations	Mean: Difference in degrees	Mean of 72 observations weekly	Dew Point: Mean of 72 results	Self-Registering: Highest in the sun: During the week	Highest in the sun: Mean of 7 observations	Lowest on the grass: During the week	Lowest on the grass: Mean of 7 observations	In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'Clock. MEAN. Of the highest on each day from 7 observations.	MEAN. Of the lowest on each day from 7 observations.	Difference between the dew point temperature and air temperature: Mean of 72 differences	Mean of the greatest on each day, 6 observations	Mean of the least on each day, 6 observations	Difference between the mean temperature of the week, and the mean temperature of the same week on an average of 25 years	WIND: Pressure in lbs. on the square foot: General direction	Greatest pressure in the week	Mean for the week	The amount of Horizontal movement of the air in each week	Mean amount of Cloud, 0-10	Rain in inches (7 days)
		inches	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o				miles		
Jan. 2nd	Full 1st	30.277	37.6	19.0	34.0	23.6	10.4	29.0	23.8	45.5	43.3	11.0	20.0	—	33.2	5.3	9.5	2.3	—7.3	Calm	0.1	0.0	450	8.5	0.03
,, 9th	Last qr. 9th	29.90	46.0	29.6	40.6	34.0	6.6	37.3	—	—	—	16.3	30.6	36.7	35.0	—	—	—	+0.8	Calm & S.E.	0.1	0.0	655	9.4	0.18
,, 16th	,,	29.92	42.5	25.0	37.3	27.1	10.2	32.2	—	—	—	13.0	18.1	36.9	35.7	—	—	—	—3.3	Calm	0.0	0.0	290	4.8	0.00
,, 23rd	New, 17th, 1st qr. 23rd	29.83	43.8	27.0	35.2	29.9	5.3	32.6	—	—	—	19.5	25.9	34.8	33.7	—	—	—	—3.2	Calm	0.1	0.0	350	8.7	0.49
,, 30th	,,	29.218	49.3	30.6	45.7	37.0	8.7	41.7	37.7	56.6	51.8	17.5	30.4	40.9	37.8	4.9	7.7	1.1	+4.3	S.S.W.	12.5	1.3	1680	7.2	0.48
Feb. 6th	Full, Jan. 31st	29.761	48.5	28.5	38.5	31.3	7.2	34.8	31.6	59.3	47.0	17.5	24.0	38.2	36.3	3.2	6.1	0.9	—3.0	Calm	4.0	0.2	790	9.8	0.12
,, 13th	Last qr. Feb. 8th	29.588	36.0	12.0	32.0	17.5	14.5	25.6	21.9	54.0	41.9	10.7	16.7	34.5	33.6	3.7	7.2	0.3	—13.7	S.W.	1.5	0.0	685	6.8	0.76
,, 20th	New, 15th	29.744	54.0	37.1	50.4	41.3	9.1	45.7	41.2	65.5	56.6	31.2	36.0	40.3	37.8	4.4	9.3	0.9	+7.2	W.S.W.	16.5	1.7	1990	7.6	0.54
,, 27th	1st qr. 22nd	30.067	46.1	28.0	40.4	32.2	8.2	35.8	29.2	58.2	50.1	15.5	23.2	42.6	41.4	6.7	11.5	3.3	—4.2	E.	1.5	0.1	640	8.8	0.00
Mar. 6th	Full, Mar. 2nd	30.246	44.4	29.6	41.6	33.0	8.6	37.9	33.0	63.0	50.3	15.3	27.3	38.2	36.9	4.9	8.7	1.8	—3.3	N.N.E.	5.5	0.1	665	9.2	0.04
,, 13th	Last qr. 10th	30.007	47.5	18.7	42.1	28.7	13.4	35.7	27.9	67.0	57.6	9.0	20.8	38.6	38.5	7.8	13.9	2.5	—5.9	N. & S.W.	3.5	0.2	800	7.5	0.14
,, 20th	New, 16th.	29.695	61.2	33.7	58.2	41.3	16.9	48.8	35.3	77.3	71.9	20.8	29.2	42.4	40.9	13.6	21.6	7.3	+6.3	S.S.W.	3.0	0.4	1265	2.4	0.00
,, 27th	1st qr. 23rd.	29.781	60.7	31.8	58.3	37.0	21.3	46.6	40.4	89.0	76.0	20.2	27.2	46.4	45.9	6.1	16.5	0.7	+4.6	S.W.	4.0	0.1	505	5.1	0.04
Mean, Highest, or Lowest, of the 13 weeks.		29.846	6	12.0	42.6	31.8	10.8	37.2	32.2	* 89.0	* 54.7	9.0	25.3	39.1	37.4	* 6.0	* 11.2	* 2.1	—1.6		16.5	0.3	828	7.3	2.82

* Mean and Highest of 10 weeks.

1847 Week ending	Small Pox	Measles	Scarlatina	Hooping Cough	Typhus	Diarrhœa, Dysentery, and Cholera	Influenza	Phthisis or Consumption	Other diseases of the lungs	‡ Deaths at Three Ages, (exclusive of violent and sudden Deaths): 0 to 15	15 to 60	60 and upwards	Deaths from all causes, (exclusive of violent and sudden deaths)
Jan. 2nd	7	10	16	42	49	14	8	141	410	524	450	417	1391
,, 9th	3	14	22	46	39	16	4	174	437	500	470	387	1358
,, 16th	4	9	12	44	40	24	10	158	375	448	439	362	1250
,, 23rd	5	11	14	50	28	15	7	146	385	467	418	317	1202
,, 30th	2	9	14	38	32	13	8	115	369	420	365	334	1119
Feb. 6th	7	8	17	36	28	12	4	148	302	425	366	290	1082
,, 13th	3	5	14	41	26	16	4	133	325	419	377	318	1114
,, 20th	8	6	21	41	32	21	6	160	384	457	419	339	1215
,, 27th	11	4	13	48	41	12	1	119	265	425	313	269	1007
Mar. 6th	8	5	11	44	28	21	4	128	235	428	290	243	961
,, 13th	7	5	18	34	32	11	0	130	238	405	330	265	1000
,, 20th	9	10	13	48	33	18	5	142	236	417	359	297	1074
,, 27th	8	3	11	32	34	15	2	129	217	379	335	235	949
	82	99	196	544	442	215	63	1823	4158	5714	4981	4073	14722

* The ages of 4 were not specified in the Returns.

‡ Deaths enumerated under the heads "violent" and "sudden," chiefly consist of cases returned by the Coroner, many of which are registered, not when they occur, but at uncertain periods; and they are therefore excluded from this comparison of weeks.

REMARKS ON THE WEATHER DURING THE QUARTER ENDING 1847, MARCH 31st,

By James Glaisher, Esq. of the Royal Observatory, Greenwich.

THE mean temperature of the quarter at Greenwich, was 37°4, which is 6°3 *below* that of the corresponding quarter of 1846; 2° *above* that of 1845; 1°6 *below* that of 1844; and 1°6 *below* that of the quarter for 25 years. The mean temperature of the week ending January 25th, was 41°7; that of the preceding week was 32°6; and that of the following week, was 34°8: these numbers indicate great and frequent changes. The mean temperature of the week ending February 13th, was 25°6, being the lowest in the quarter. This remarkable week deserves particular mention. At Greenwich the departures from the mean on the 8th, 9th, 10th, 11th, 12th and 13th were 15°3, 16°3, 12°4, 9°0, 15°7, and 13°6 respectively. This very great and long continued fall below the average of the season appears to have applied to a zone of the country only, but to have been very uniform within that zone; the southern limit of which was in latitude 50°45, and the northern limit in latitude 52°. This remarkable cold was most severe in the county of Sussex, and particularly at Uckfield, in latitude 50°59; between this latitude and 51°30 it was very severe; beyond 51°30 and so extending to 52° it was gradually less and less. In a letter addressed to me by C. L. Prince, Esq., of Uckfield, giving an account of the weather of this week, he states that

On the 8th day the lowest reading of the thermometer was		14°,	and the highest was	35°.
9th	,,	15	,,	33
10th	,,	15	,,	36
11th	,,	19	,,	40
12th	,,	1 !	,,	33
13th	,,	17	,,	34
14th	,,	19	,,	44
15th	,,	40 !	,,	53 !

It may be interesting to take an extract from my own observations, taken at Dartmouth Terrace, Blackheath, in the parish of Lewisham, corresponding to the above.

On the 8th day the lowest reading of the thermometer was		17°0,	and the highest was	30°0.
9th	,,	16°6	,,	29°0.
10th	,,	15°0	,,	37°5.
11th	,,	21°0	,,	36°5.
12th	,,	6°0	,,	33°5.
13th	,,	17°0	,,	33°5.
14th	,,	20°0	,,	45°0.
15th	,,	44°0	,,	52°5.

The very close agreement between these two series of observations, day by day, proves that the great cold during this week was very uniform through this extent of country in latitude. From the circumstance of the minimum reading at Beckington, in Somersetshire, whose latitude is only 6′ less than that of Lewisham, and whose longitude is 2°22′ west, being 5°, differing by 1° only from the minimum at the latter place, the depression of temperature would seem to have extended across the whole country between these latitudes. Its southern limit appears to have been Chichester, and those places on its parallel, and its northern limit appears to have corresponded with a parallel passing a little south of Thwaite and Cambridge.

During the months of February and March the hygrometrical state of the air was very remarkable on account of its great dryness generally, and particularly at times when the temperature of the air was very low. (See foot notes appended to the weekly returns of February 27th and March 13th.) From the numbers contained in the quarterly tables and abstracts, it would appear that this great dryness was general throughout the whole of the country, and from letters I have received from John Fletcher Miller, Esq., of Whitehaven, it seems to have been so in almost an equal degree at that place, notwithstanding its proximity to the Irish Sea. We may, therefore, consider that the weather at Greenwich in this respect during the quarter ending 1847, March 31st, represents that of the country generally.

The horizontal movement of the air was about 828 miles per week; being less than it usually is at this season by 200 miles.

The highest and lowest readings of the thermometer in the quarter, are shown for Greenwich, and for other places in the subjoined quarterly table.

The highest reading of the thermometer, whose bulb was placed in the full rays of the sun, and protected from lateral wind striking it, was 89°: the highest reading of a thermometer placed on the grass, was 95°, and the lowest was 9°; the lowest on flax on grass, was 2°.

Vegetation during the past quarter has been subjected to frequent low temperatures. In January the reading of the thermometer on grass was below 32° on 25 nights; the lowest was 13°0; and it was several times below 20°: in February it was 20 nights below 32°: the lowest was 10°5: there were two readings at 12°, and there were several below 20°. In March the reading was below 32° on part of 25 nights; the lowest being 9°, and there were several below 20°: So that vegetation through the whole quarter has been almost continually subjected to low temperatures at night, and in consequence of the dryness of the atmosphere during the day the evaporation from vegetation has been large, and therefore both during the night and day its temperature has been below the average of the season; consequently the sap has scarcely risen in trees, and vegetation generally is very backward.

Upon the whole the weather in this quarter has been more severe, and painful to the senses, than in either of the corresponding quarters in the three preceding years, and much more so than has been indicated by the thermometers, in consequence of the extreme dryness of the atmosphere causing the moisture from the skin to evaporate quickly, and thus subjecting it to the temperature of evaporation, which throughout this quarter has been much below that of the air.

The winter of 1846-7 may be considered to have commenced suddenly on November 27th 1846, and to have continued fully to the end of this quarter.

QUARTERLY METEOROLOGICAL TABLE,

Compiled and deduced from Observations made by the Gentlemen whose names are mentioned in the first column.

	Year 1847 Months	Latitude	Longitude	Mean height of Barometer corrected & reduced to 32°	Mean Elastic Force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS										WIND		Amount of Clouds 0—10	RAIN		REMARKS
							Dry Bulb	Wet Bulb	Temperature of the Dew Point		Self-registering						Average strength 0—6	General Direction		Number of days on which it fell	Amount in inches	
							Mean of daily Observations	Mean of daily Observations	Deduced Dew Point	Observed Dew Point	Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Range of the Thermometer in the month						
		° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°					in.	
GUERNSEY,	Jan.	49·30 N.	2·47 W.	....	....	....	42·1	....	....	....	....	....	44·9	38·7	41·8	....	....	.....	....	9	2.58	The wind blew—
Rev. T. Salwey.	Feb.	....	....	....	....	....	41·8	....	....	....	....	....	44·6	37·3	41·0	....	....	.....	....	11	2·57	17 days E. of Meridian.
	March	....	....	....	....	....	44·9	....	....	....	....	....	48·8	39 0	43·9	....	....	.....	....	9	1·48	15 days W. of Meridian.
																						23 days E. of Meridian.
HELSTON,	Jan.	50·7	5·18 W.	29·630	0·261	29·369	45·2	42.5	39·6	....	55·0	29 0	45·0	39·3	42·1	26·0	1·9	S.E. & S.W.	6·3	14	3·71	Daily observations at 9h. A.M., 3h. P.M. and 9h. P.M.
M. P. Moyle, Esq.	Feb.	....	....	29 828	0·236	29·592	43·3	40·3	36·7	....	56·0	25·0	46·8	35·7	41·2	31·0	1·9	S.W. & N.	4·7	12	1·83	
	March	....	....	29·831	0·266	29·565	46·8	43·6	40·1	....	59·0	26·0	50·4	38·1	44·2	33·0	1·5	N.E. & S.E.	5·3	15	3·22	
FALMOUTH,	Jan.	50·8	5·2 W.	29·72	....	....	43·3	....	....	....	51·0	31·0	45·3	40·2	42·7	20·0	2·1	E. & E S.E.	8·4	21	4·77	Observations at 9h. A.M., 3h. P.M. and 9h. P.M.
Lovell Squire, Esq.	Feb.	....	....	29·90	....	....	41·3	....	....	....	53 0	29·0	43·9	37·0	40·5	24·0	2·2	N.	6·2	12	2·31	
	March	....	....	29·92	....	....	43.4	....	....	....	55·0	30·0	47·0	39·6	43·3	25·0	1·8	N.N.E. & S.	7·4	18	4·57	
TRURO,	Jan.	50·17	5·4 W.	29·797	....	....	....	....	....	....	51·0	34·0	43·6	40·4	42·0	17·0	1·6	S.W. & S.E.	....	21	5·17	Observations at 9h. A.M., 3h. P.M. and 9h. P.M.
Dr. C. Barham.	Feb.	....	....	29·985	....	....	....	....	....	....	50 0	27·0	42·4	37·6	40·0	23·0	1·7	N., S.W. & S.E.	....	16	2·40	
	March	....	....	29·997	....	....	....	....	....	....	52·0	30·0	45·5	40·3	42·9	22 0	1·6	N. & S.E.	....	16	4·46	
WOODFIELD, near TORQUAY, DEVON,	Jan.	,,	,,	,,	....	....	....	....	....	38·4	53·0	30·0	46·4	29·5	43·0	23·0	2·6	N.E.	....	19	4·02	
E. Vivian, Esq.	Feb.	....	....	....	....	....	....	....	....	37·5	56·0	26·0	46·1	37·8	41·9	30·0	2·7	N.E.	....	14	1·19	
	March	....	....	....	....	....	....	....	....	39·1	57·0	30·0	49·4	39·9	44·8	27·0	2·4	N.E.	....	12	2·53	
EXETER,	Jan.	50·44	3·33 W.	29·47	0·199	29·27	39·2	36·2	31·9	....	53·0	29·0	45·0	36·1	40·5	24·0	....	E. & S.E.	....	9	2·52	
Dr. Shapter.	Feb.	....	....	29·74	0·186	29·55	38·5	35·1	30·0	....	56·0	18·0	45·7	34·2	39·9	38·0	....	E. & N.E.	....	13	1·50	
	March	....	....	29·61	0·183	29·43	43·1	37·0	29·7	....	60·0	29·0	49·6	36·4	43·0	31·0	....	S. & S.E.	....	8	3·28	
BRIGHTON, BLACK ROCK,	Jan.	50·50	0·9 W.	29·877	0·209	29·668	34·8	34 2	33·2	....	....	....	37·4	34·0	36·0	....	....	N.E. & SW.	7·5	16	....	
J. O. N. Rutter, Esq.	Feb.	....	....	29·930	0·204	29·726	34·9	34·0	32·6	....	....	....	38·9	30·7	34·9	....	....	N.E. & S.W.	7·0	8	....	
	March	....	....	29·984	0·226	29.758	40·8	38·4	35·5	....	....	....	44·5	34·7	40·3	....	....	N.E.	6·0	6	....	
CHICHESTER,	Jan.	50·50	0·46 W.	29·797	....	....	....	....	....	33·4	48·0	27·0	40·5	33·2	36·9	21·0	....	N.E. & E.	....	....	1·77	Observations at 9h. A.M. and 10h. P.M.
Wm. Hills, Esq., Curator of Philosophical Institution.	Feb.	....	....	29·912	....	....	....	....	....	30·9	50·0	18·0	40·7	29·9	35·3	32·0	....	N.W. & S.W.	....	....	1·91	
	March	....	....	29·991	....	....	....	....	....	36·4	58·0	23·0	48·2	34·6	41·4	35·0	....	N.E. & S.E.	....	....	1·15	
UCKFIELD,	Jan.	50·59	0·5 E.	29·838	0·208	29·630	35·6	34·6	33·1	33·9	51·0	24·0	40·7	32·2	36·4	27·0	....	E.	....	10	1·81	Feby. 8th, snow 14 inches in depth.
C. L. Prince, Esq., Surgeon.	Feb.	....	....	29·900	0·192	29·708	33·6	32·4	31·0	29 2	53·5	1·0	41·6	28·3	34·9	52·0	....	E.	....	9	1·73	
	March	....	....	29·965	0·222	29·743	41·4	38·5	34·0	34·8	67·0	20·0	51·8	32·9	42·4	47·0	....	N.E.	....	7	0·67	A dry month.
SAFFRON WALDEN,	Jan.	52·2	0·15 E.	....	....	....	....	....	....	....	....	....	....	....	....	....	3	E.	6	15	1·67	
T. Spurgin, Esq.	Feb.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	N.W.	6	14	0·91	
	March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	N.E.	3	18	0·88	

QUARTERLY METEOROLOGICAL TABLE, (*continued.*)

Year 1847 / Months	Latitude	Longitude	Mean height of Barometer corrected & reduced to 32°	Mean Elastic Force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced Dew Point	Temperature of the Dew Point — Observed Dew Point	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	REMARKS
	° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°						
BECKINGTON,	51·24	2·22 W.	29·594	0·226	29·368	36·7	36·6	36·5	....	49·0	24·0	....	....	36·7	25·0	0·7	S.E. by E.	3·3	11	1·6	
Rev. C. Blathwayt, A.M. Feb.	....	....	29·700	0·219	29·481	37·3	36·2	34·5	....	55·0	5·0	....	....	34·4	50·0	0·6	W.N.W. & S.S.W.	2·3	13	1·61	
March	....	....	29·765	0·227	29·538	42·9	39·9	36.0	....	61·0	13·0	....	....	36·5	48·0	0·7	S.	2·4	11	2·48	
GREENWICH OBSERVATORY.	51·31	0 0	29·735	0·209	29·526	35·3	34·5	33·4	....	....	....	....	....	....	....	....	.....	....	....	....	
The Astronomer Royal. Feb.	....	....	29·790	0 197	29 593	35·4	33·9	31·7	....	....	....	....	....	....	....	....	.....	....	....	....	
March	....	....	29·882	0·214	29·668	41·4	38·0	33·9	....	....	....	....	....	....	....	....	.....	....	....	....	
WALWORTH,	51·31	0·6 W.	29 808	....	....	....	....	....	....	50 0	25·0	....	....	35·5	25·0	2*	E. & S.E.	8	13	0·92	
W. H. White, Esq. Feb.	....	....	29·836	....	....	....	....	....	....	53·0	12 0	....	....	35 0	41·0	2	S.W.	8	8	1·07	
March	....	....	30·256	....	....	....	....	....	....	62·0	19·0	....	....	41·0	43·0	2	N.E. & S.E.	5	9	0·71	
POOL COTTAGE,	52·4	2·54 W.	29·32	....	....	37·8	....	....	....	46·0	29·0	....	....	....	17·0	....	.....	2·3	15	3·98	in. Evaporation 0·39
J. Pendergrass, Esq. Feb.	....	....	29·45	....	....	40·2	....	....	....	53·0	30 0	....	....	....	23·0	....	.....	1·5	13	1·82	0·94
March	....	....	29·37	....	....	46·8	....	....	....	56·0	32 0	....	....	....	24·0	....	.....	2·2	9	2·72	2·38
CAMBRIDGE OBSERVATORY.	52·13	0·6	29·834	0·222	29 612	35·4	....	....	....	49·2	19·0	41·9	30·8	36·4	30.2	0	.....	8	7	1·49	Observations at 9h. A.M.,
John H. Morgan, Esq. Feb.	....	....	29·870	0·220	29·650	38·0	36·7	34·8	....	58·0	20·2	43·3	30.6	37·0	37·8	½	N.E.	8	8	0·98	and 3h. P.M.
March	....	....	29·956	0·228	29·728	44·9	40.6	35·8	....	64·2	18·7	52·2	33·4	42·8	45·5	½	N.	6	11	1·09	
THWAITE,	52·8	1·16 E.	....	....	....	....	....	....	....	....	....	47·0	23 0	35.8	24·0	2·5	S.E. & E.	....	6	0·52	Observations at 8h. A.M.;
Orlando Whistlecraft, Esq. Feb.	....	....	....	....	....	....	....	....	....	....	....	55·0	22·0	37·0	33·0	2·8	S.W. & N.W.	....	5	0·47	2h. P.M.; and 8h. P.M.
March	....	....	....	....	....	....	....	....	....	....	....	63·5	19·0	42·6	44·5	3·0	E.	....	6	1·13	
EMPINGHAM,	52·41	0·43 W.	29·65	....	....	36·0	....	....	....	45·0	28·0	....	....	....	17·0	....	S.E.	....	15	1·75	Observations at 2h. P.M.
Wm. Fancourt, Esq. Feb.	....	....	29·80	....	....	36·8	....	....	....	51·0	28·0	....	....	....	23·0	....	S.W.	....	15	1·15	
March	....	....	29·95	....	....	46·4	....	....	....	58·0	34·0	....	....	....	24·0	....	N.E.	....	16	0·85	
WHITTINGTON.	52·54	3·6 W.	29·49	....	....	34·8	....	....	....	47·0	25·0	....	....	....	22·0	1	S.E.	8	19	3·28	
Rev. C. A. A. Lloyd. Feb.	....	....	29 50	....	....	35·0	....	....	....	54·0	14·5	....	....	....	39·5	2	Variable	7	16	1·42	
March	....	....	29·57	....	....	44·0	....	....	....	58·3	15·0	....	....	....	43·3	2	N.E. & S.E.	4·5	16	2·18	
DERBY,	52·55	1·28 W.	29·63	....	....	....	....	....	....	....	....	38·6	31·6	35·1	....	....	E.	....	15	2·62	
Mr. J. Davis. Feb.	....	....	29.67	....	....	....	....	....	....	....	....	42·0	29·7	35·8	....	....	S.W. & W.	....	11	1·83	
March	....	....	29·77	....	....	....	....	....	....	....	....	49·8	32·6	41·2	....	....	N.E. & N.	....	10	1·18	
HIGHFIELD HOUSE,	52·57	1·10 W.	29·761	0·201	29·560	34·4	33·6	32·3	....	46·5	24·5	....	....	34·8	22·0	1·0	E. & S.E.	7.8	16	2·14	Observations at every 3h.
Edward Joseph Lowe, Esq. Feb.	....	....	29·663	0·222	29·441	36·5	35·9	35·0	....	54 0	20·0	....	....	37·2	34·0	1·3	W. & N.E.	6·1	15	1·41	interval, except at 3h. A.M.
March	....	....	29·768	0·252	29·516	43·4	41·2	38·5	....	61·5	23·0	....	....	44·1	38·5	1·6	N. & W	4·5	15	1·07	

QUARTERLY METEOROLOGICAL TABLE, (*continued.*)

Year 1847 / Months	Latitude	Longitude	Mean height of Barometer corrected & reduced to 32°	Mean Elastic Force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced Dew Point	Temperature of the Dew Point — Observed Dew Point	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean imp of the month	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	REMARKS
	′ °	′ °	in.	in.	in.	°	°	°	°	°	°	°	°	°							
LIVERPOOL OBSERVATORY	Jan.	53·25	3·0 w.	29·792	0·211	29·581	38·3	36.4	33·5	....	47·2	27·9	40·8	35·4	38·1	9·3	1.3	S.E. by S.	8·1	11	1·76	The instruments are all read daily at 2h. Gottingen mean Astronomical time.
John Hartnup, Esq.	Feb.	....	....	29.889	0·218	29·671	40 0	37·5	24·5	....	51·6	27·1	42·0	35·2	38·6	24 5	1·3	N.W. & S.E. by E.	7·8	18	1 78	
	March	....	....	29·973	0·232	29·741	46·6	41·7	36·3	....	60·2	26 8	49·0	39·1	44·1 °	33·4	1·0	S.S.E. & N.E.	7·0	10	1·27	
MANCHESTER,	Jan.	53·29	1·47 w.	29·69	0·207	29·483	38·0	36·0	33·0	....	48·0	24·0	38·5	32·0	35·5	24 0	....	S.E.	....	16	2·08	
Messrs. J. B. and J. Ronchetti.	Feb.	....	....	29·78	0·222	29·558	40 5	38·0	35 1	....	51·0	18·0	40·5	30·0	35·0	33·0	....	N.W.	....	17	2·90	
	March	....	....	29·86	0·233	29·627	48·0	42·5	36·4	....	62·0	22·0	49 0	35·0	42·0	40·0	....	S. & N.E.	....	17	1·17	
WHITEHAVEN	Jan.	54·33	3·35 w.	29·626	0·205	29·421	....	....	32·7	33·2	48·0	23·0	39·5	34·2	36·9	25·0	2	S.E.	....	13	1·87	
John Fletcher Miller, Esq.	Feb.	....	....	29·720	0·210	29·510	....	....	33·4	31·6	49·0	24·5	40·6	33·0	36·8	24.5	1	Variable	....	15	1·83	
	March	....	....	29·818	0·243	29·575	....	....	37·6	36·1	59·0	24·5	47·6	37·7	42·7	34·5	2	S.	..	12	1·37	
DURHAM,	Jan.	54.46	1·34 w.	29·478	0·209	29·269	35·2	34·4	33·2	....	45·4	21·8	37·4	32·0	31·7	23·6	1·7	S.E. to S.W.	....	8	0·57	Observations at 9h. A.M. and 9h. P.M.
Rev. R. A. Thompson.	Feb.	....	....	29·492	0·167	29·325	35·3	32·0	27·2	....	50·7	17·2	39·5	31·3	35·4	33·5	1·7	N.W.	....	7	0·16	
	March	....	....	29·616	0·225	29·391	40·1	38·0	35·5	....	60 4	20·6	47·0	34·4	40·7	39·8	2·0	N.N.W.	....	12	0·55	
NEWCASTLE-UPON-TYNE,	Jan.	54·58	1·37 w.	29·732	....	....	36.9	....	....	....	48·5	25·0	....	....	33·0	....	....	S. by E.	....	11	1·43	
G. Muras, Esq.	Feb.	....	....	29·739	....	....	37·4	....	....	....	51·0	21·0	....	....	36·5	....	....	W.S.W.	....	8	1·71	
	March	....	....	29·862	....	....	43·0	....	....	....	63·0	30·0	....	....	42·2	....	....	Very variable	....	11	1.27	

By applying the necessary corrections to the observations of the thermometer at each place, the mean monthly temperatures of all the stations were deduced. Those places which are situated in the counties of Cornwall and Devonshire were found to agree well with each other, but to differ in a very marked manner from all others; and particularly so in the months of January and February. The monthly mean temperatures at all the stations in England, excepting those in the above mentioned counties, were found to be very nearly alike in each month, showing that the difference in latitude has not had any influence over the mean temperature. The average temperature of Cornwall and Devonshire in the month of January, was 41°3; of February, 40°1; and of March, 42°2: and the average temperature of other places in the return in January, was 35°2; in February, 35°5; and in March, 40°8: So that the mean temperature of the counties of Cornwall and Devonshire exceeded that of the other places, in January, by 6°1; in February, by 4°6; and in March, by 1°4.

The next table was formed from the preceding tables, by calculating the hygrometrical state of the air in the different places by Glaisher's Hygrometrical Tables, and by taking the mean quarterly returns of the temperature of the air, and pressure of the atmosphere, correcting the latter for diurnal changes and for the height of the cistern of the barometer above the level of the sea.

QUARTERLY METEOROLOGICAL TABLE.

NAMES OF THE PLACES	Mean pressure of the Atmosphere of Dry Air reduced to the level of the Sea	Mean temperature of the Air	Highest reading of the Thermometer	Lowest reading of the Thermometer	Range of the Thermometer	WIND		Mean amount of Cloud 0—10	RAIN		Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of humidity	Whole amount of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air
						Mean estimated strength 0—6	General Direction		Number of days on which it fell	Amount collected					
	in.	°	°	°	°	°		°		in.	gr.	gr.		in.	gr.
Guernsey	.....	41·6	....	....	....	....	E.	....	29	6·63	....	....	....	....	....
Helston	29·629	41·9	59·0	25·0	34·0	1·4	E.	5·4	41	8·76	2·9	0·7	0·810	3·5	544
Falmouth	.....	41·6	55·0	29·0	26·0	2·0	N. & E.	7·3	51	11·65	....	....	....	....	....
Truro	.....	41·0	52·0	27·0	25·0	1·3	N. & E.	....	53	12·03	....	....	....	....	....
Woodfield, Devon.....	.....	42·7	57·0	26·0	31·0	2·5	N.E.	....	45	7·74	....	....	....	....	....
Exeter	29·64	40·6	60·0	18·0	42·0	....	E.	....	30	7·30	2·2	0·9	0·715	2·6	545
Brighton, Black Rock...	.....	36·9	....	....	....	....	N.E.	6·8	30	omitted.	....	....	....	....	....
Chichester	.....	37·3	58·0	18·0	40·0	....	N.E.	....	....	4·83	....	....	....	....	....
Uckfield	(29·895)	37·3	67·0	1·0	66·0	....	E.	....	26	4·21	2·5	0·3	0·873	2·8	555
Saffron Walden.....	.....	....	....	....	....	....	.....	....	47	3·46	....	....	....	....	....
Beckington, Somerset ..	.....	35·3	61·0	5·0	56·0	....	Variable	(2·7)	35	5·85	....	....	....	....	....
Greenwich Observatory.	29·769	37·4	64·5	10·0	54·5	....	S.E. & N.E.	....	....	....	2·4	0·4	0·861	2·8	552
Walworth, Surrey	.....	37·2	....	....	....	2·0	S.E.	7·0	30	2·70	....	....	....	....	....
Pool Cottage, Hereford	.....	38·1	....	....	....	....	N.E.	7·0	37	8·52	....	....	....	....	....
Cambridge Observatory	29·760	38·0	64·2	18·7	45·5	0·3	N.E.	7·3	26	3·56			....	....	....
Thwaite, Suffolk	.....	37·9	63·5	19·0	44·5	2·8	E.	....	17	2·12	....	....	....	....	....
Empingham, Rutland ..	.....	35·8	58·0	28·0	30·0	....	E.	....	46	3·75	....	....	....	....	....
Whittington	.....	36·5	58·3	14·5	43·8	1·7	S.E.	6·5	51	6·88	....	....	....	....	....
Derby	.....	36·8	....	....	....	....	Variable	....	36	5·63	....	....	....	....	....
Highfield House, Notts...	29·690	38·2	61·5	20·0	41·5	1·3	E.	6·2	46	4·62	2·6	0·3	0·905	3·1	550
Liverpool Observatory..	29·716	38·7	60·2	26·8	33·4	1·2	S.E.	7·6	39	4·81	2·6	0·7	0·896	3·0	550
Ardwick, Manchester...	.....	37·0	62·0	18·0	44·0	....	.....	....	50	6·15	2·6	0·8	0·780	3·0	545
Whitehaven	.....	38·2	59·0	23·0	36·0	1·5	S.E.	....	40	5·07	2·6	0·7	0·781	3·0	543
Durham	29·716	36·5	60·4	17·2	43·2	1·7	N.W.	....	27	1·28	2·4	0·5	0·844	2·7	547
Newcastle-on-Tyne	.....	36·7	63·0	21·0	42·0	....	S. by E.	....	30	4·41	....	....	....	....	....
No. of Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

From this table we learn the following particulars:—As the differences between the numbers in the first column, for all places except Uckfield,* are small, and very likely arise from the different methods adopted in reducing the barometer readings to the constant temperature of 32°, we may consider that the pressure of the atmosphere of dry air has been the same at all these places, and as they extend to extreme latitudes, that it has been the same at all parts of England. By taking the means of these numbers, we find that the average pressure of the atmosphere of dry air for England during the quarter ending 1847, March 31, was 29·706 inches.

From the numbers in the second column, we find for the quarter ending March 31, 1847, that the mean temperature of the counties of Cornwall and Devonshire was 41°6, and for the remaining counties it was 37°2.

The range of the temperature has been different at different places, and no simple law depending on the latitude can be deduced from the numbers in the fifth column: the range, however, in Cornwall and Devonshire has been much smaller than in the other parts of England. The mean quarterly range for these counties was 31°6, and that for the remaining counties, was 44°3: the extreme range in the above observations was 66°, being the same as that at Uckfield, at which place the thermometer reading was both higher and lower than in any other place in the country, during this quarter.

From the numbers in the 6th column it would seem that the velocity of the wind has been nearly uniform throughout the country; and from the 7th column we find the mean directions have been S.E. and N.E., except at Durham, where it was N.W. From the numbers in the 8th column, it appears that the average amount of cloud has been nearly the same at all parts of the country, (except at Beckington; but it is very probable that the number above, ranging with this place, may be in error), and such as to cover about three-fifths of the whole sky.

The fall of rain has been the largest in amount in the county of Cornwall and Devonshire: the mean amount for those counties is 9·5 inches. The fall at Pool Cottage, Hereford, is the next in order of magnitude, being 8·52 inches: the next in order are Whittington and Manchester; and the fall at Durham was only 1·28 inches.

From the numbers in the last five columns the following results are deduced:—

The average weight of vapour in a cubic foot of air	in the counties of Cornwall and Devonshire, was	grains 2·6	; and in the remaining counties of England	grains 2·6
The additional weight of vapour required to saturate a cubic foot of air	,,	0·8	,,	0·5
The average degree of humidity	,,	0·762	,,	0·848
The average amount of water held in solution in a vertical column of the atmosphere..	,,	inches 3·1	,,	inches 2·9
The average weight of a cubic foot of air under its average temperature, humidity, and pressure	,,	grains 544	,,	grains 549

So that the counties of Cornwall and Devonshire were not only much warmer, but the degree of humidity of the atmosphere was much less, and the weight of a certain mass of air was less than in any other part of the country.

* The Barometer at Uckfield has not been compared with a Standard Barometer; it would seem that its readings are too high by 0·1 in. or 0·2 in.

QUARTERLY RETURN

OF THE

Health & Mortality in 117 Districts of England,

For the Quarter ending June 30th, 1847.

ANNUAL SERIES VI.] PUBLISHED BY AUTHORITY OF THE REGISTRAR GENERAL. [1847.—No. 2.

STATE OF THE PUBLIC HEALTH IN THE SECOND QUARTER OF THE YEAR 1847.

" The Quarterly Returns are obtained from 117 Districts, sub-divided into 582 Sub-Districts. *Thirty-six* Districts are in the Metropolis, and the remaining 81 comprise, with some agricultural Districts, the principal towns and cities of England. The population was 6,612,800 in 1841."

The returns of the last quarter indicate no improvement in the state of the public health: 51,585 deaths were registered; which is 6745 above the average of the season.

The annexed Table shews that the mortality was *below* the average in the spring quarters of 1841, 1842, 1843, 1844, 1845, and 1846, and *above* the average in the spring quarters of 1839, 1840, but to nothing like the extent observed in 1847.

	1839	1840	1841	1842	1843	1844	1845	1846	1847
Deaths registered in the June Quarters of 9 years	41,244	42,074	39,133	38,569	40,343	38,977	40,847	43,734	51,585
Deaths which would have been registered if the mortality had been uniform, and the Numbers had increased from 1839 at the rate of 1·75 per cent. annually	39,029	39,712	40,407	41,115	41,834	42,566	43,311	44,069	44,840
UNHEALTHY SEASONS Difference above the calculated number	2,215	2,362	..	..	..	..	..	..	6,745
HEALTHY SEASONS Difference below the calculated number	..	..	1,274	2,546	1,491	3,589	2,464	335	..

The deaths in the quarter ending June 30th, have, in the last 4 years, been 38997, 40847, 43734, and 51585. The mortality shewed a disposition to rise in the same quarter last year; and in the remarks appended to the returns, the necessity of active measures to avert the impending ravages of disease was insisted on, unfortunately without producing up to the present time any practical effect. The deaths, which in the 4 quarters ending June, 1846, were 36153, 39321, 43850, and 43734, became 51427, 53093, 56105, and 51585, in the 4 following quarters, which ended on the 30th of June last. Common cholera was fatal; scurvy prevailed more or less all over the country, from the want of vegetable food, the potato having failed; all food became scarce and dear; typhus broke out, is still epidemic, and shews no sign of decline. To add to the calamities of the country, the poor of Ireland dying of starvation, and consumed by fever, were cast on the coast of England, and are now lodged in the crowded, filthiest parts of the most insalubrious cities, or in workhouses and hospitals provided by English parishes. The deaths in the 12 months, ending June 30th, were 212,210. The average of the 7 preceding years was 165,831. Add 7·19 per cent. for increase of population, and the average applicable to 1847 is 177,700. The excess on the year was thus 34,000 deaths.

DEATHS REGISTERED

Years	1839—40	1840—41	1841—42	1842—43	1843—44	1844—45	1845—46	1846—47
In the Quarters ending								
September	37,317	39,498	36,058	39,409	36,953	38,933	36,153	51,427
December	41,740	44,186	39,292	39,662	42,607	44,081	39,321	53,093
March	46,376	46,967	44,903	43,748	46,136	49,949	43,850	56,105
June	42,074	39,133	38,569	40,343	38,977	40,847	43,734	51,585
Deaths in the year ..	167,507	169,784	158,822	163,162	164,673	173,810	163,058	212,210

These districts, however, including nearly all the towns of England, are always unhealthy in their natural state. The mortality is not more than 18 in 1000 in many districts and entire counties where the population is far from being in a favourable condition; and after every allowance has been made, if the ages of the inhabitants be taken into account, the mortality should certainly not exceed 2 per cent.; at which rate, as the population was about 7,274,900, the deaths in the year, June, 1846—7, would have been 145,498, or less by 32,200, than the average 177,700. The excess of mortality in the twelvemonth ending June, 1847, tried by this standard, was '6,712' and that in only one-fourth part of the population of the united kingdom.

That this insalubrity exists is incontestable; the causes of it are known; and that they admit of removal to a considerable extent is allowed by all who have paid attention to the subject. But it is a long time before the plainest principles can be carried out. When the works are commenced, it will be some years before they can be completed; and as yet nothing has been begun. After Captain Cook had demonstrated that the health of the navy could be immeasurably improved, thousands of the best seamen had to perish—expeditions to be defeated—millions of pounds expended—30 years to elapse before anything whatever effectual was done to place the health of the British navy on a satisfactory footing. So it is to be feared that through the natural obstacles in the way, and the pertinacious opposition of parish vestries, of corporations, and companies, and the enemies of the public health, many times the number who have perished this year—many times 66,712 lives—will fall a sacrifice ere the towns of England enjoy, by the intervention of science, a moderate share of the health which nature confers on the country around them.

In London small-pox has been latterly prevalent; the deaths which were from 3 to 7 weekly in the beginning of the year, amounted at the close of June to 26 in the week. Typhus, which always prevails more or less, killed 58 persons in the last week of June; it was on the increase.* Diarrhœa too was becoming more fatal as the temperature advanced. Purpura and hæmatemesis have both been unusually common. They are probably of the nature of scurvy.

The groundless prejudice against fruit, and the absolute necessity in diet of vegetables containing an acid, as the potato does, were dwelt on before scurvy and its kindred diseases made their appearance. It is true, that fruit when taken to excess produces symptoms, which may be mistaken by persons unacquainted with medicine for common cholera. But beef or mutton in excess will do the same; and the experience of this year has shewn more clearly than had ever been shewn before, that bread and meat alone are not sufficient to sustain the system in health. Fruit and acid vegetables are an essential part of the food of man; but it appears that the body when duly supplied with the principles it derives from these sources, husbands them up, and can do without the acid diet for some time. The appetite for fruit and pickles is not then without its use, although the chemists have not hitherto explained how vegetable acids subserve nutrition. Without these aliments the blood loses some of its essential properties, and escapes from the vessels in purple spots under the skin, or with more fatal effect into the structure of internal organs.

We may hope that no such cases as the following will occur again in any of the public institutions of the country.

"The mortality of this district, (Maidstone, West) is about the average, except at the County Lunatic Asylum, where the deaths have amounted to 17, exactly the same number as were registered in that institution during the March quarter, while the average of the four quarters of 1846 was only 6½. The increase of mortality there is ascribed to the influence of the cold and inclement weather which prevailed during the early months of the year on the infirm and exhausted constitutions of the patients, who form the great proportion of its inmates. Added to which, the want of a due proportion of vegetables, especially potatoes, appears to have impaired their general health; this being manifested by the occurrence of numerous cases of scurvy in the month of March; none of which, however, proved fatal, as they all speedily recovered under a change of diet."

It is painful to read the Registrars' melancholy accounts of the Irish poor, and of the towns on which they have been cast for support. I can only refer to these accounts drawn up without art, by eye witnesses.

The following description of the fever as it appears in Manchester, from Mr. Leigh the Registrar of Deansgate, is interesting in a medical point of view.

"The fever is of an exceedingly low type, the subjects of it becoming typhoid, with a dry brown tongue, within a very few hours after the attack. In many, the brain is oppressed from the beginning, the pulse continuing slow (ranging from 70 to 80) throughout, the pupil being large, whilst in some there is great abdominal irritation, vomiting and diarrhœa ushering in the attack. This is followed by great tenderness over the abdomen, intolerance of pressure, and considerable distension from flatus. So far as my own observation has extended, and as far as I can gather from my professional friends, I think it may be stated generally that the mildest treatment has been the most successful. The present epidemic is essentially a famine fever, imported into this country by a class reduced to the lowest condition consistent with the carrying on of the vital processes. In such a state of the system, general derangement takes place, the body lives upon itself, furnishes its own materials for respiration, abnormal products are formed, partly retained and partly eliminated, producing disease in the system which forms them, and communicating it by the eliminated matters to others. Want compels the destitute to live together, whilst the deficiency of water, and the great personal uncleanliness of the Irish poor gives to their sordid skin a morbid coating, and the tainted air they breathe carries its poison abroad, and the well fed and the wealthy fall victims to the famine they felt not. A better supply of good food, a greater abundance of pure water, the separation of the poor from each other by removing them from the low lodging-houses in which they congregate often to the number of 18 or 20 in a single room, and the inculcation of *greater cleanliness by the priesthood of all denominations*, will, better than all mere medical treatment, subdue the fever which is now sweeping so many to the grave. The number of certified cases this quarter is considerable (211), still it leaves a large number (151) to have had no scientific or skilled assistance during the illness that has proved fatal to them. The medical officers of the union and of the children's dispensaries complain that even in most of the certified cases the children were brought to them in a dying condition. To the apathy that prevails respecting their offspring, or to the marvellous confidence in unskilled advice which the poor so generally entertain, must this be attributed. They have a strange belief in intuitive knowledge. My friend, Dr. Howard, I may remark, has informed me that nearly all the cases of fever he has had in the fever hospital of this town, have been distinctly maculated.

A considerable number of medical men, as well as some clergymen and relieving officers, have fallen victims of typhus, caught in their attendance on the sick and dying, and in the discharge of their important public duties. The number of medical men who have died of typhus is yet unknown; the Registrar of Great Howard-street, Liverpool, says:

"Eight Roman Catholic priests have fallen victims to their indefatigable attentions to the poor of their church, and one clergyman of the church of England. Another (curate of St. Martin's) nearly fell a sacrifice to the same disease. Indeed, their exemplary conduct in visiting and relieving the sick has been the theme of praise with all. From 10 to 15 persons connected with the relieving department in the parish offices have also died of the fever, taken by them in discharge of their duties.

The members of the medical profession, with the exception of the visiting clergy and a few others, stand alone in the circumstance that they discharge their duty at the risk of life. The heroic conduct of those now alive and of those who have perished, will we may hope, not be forgotten by their country.

* Dr. Lynch, whose meritorious exertions in promoting the Health of the City were referred to last Quarter, has since fallen one of the victims of typhus

COMPARATIVE METEOROLOGY OF THE SPRING QUARTERS OF THE YEARS 1845, 1846, & 1847.

The 13 weeks ending	Years	Mean height of the Barometer, from 936 observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS											In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'clock.		Difference between the dew point temperature and air temperature			Difference between the mean temperature of the quarter, and the mean temperature of the same quarter on an average of 25 years	WIND			The mean weekly amount of Horizontal movement of the air	Mean amount of Cloud, 0-10	Rain in inches (91 days)
			Highest during the quarter	Lowest during the quarter	Mean			Mean of 936 observations	Dew Point	Self-Registering				MEAN						Pressure in lbs. on the square foot					
					Of the Highest on each day, from 78 observations	Of the Lowest on each day, from 78 observations	Difference in degrees		Mean of 936 results	Highest in the sun		Lowest on the grass		Of the highest on each day from 91 observations.	Of the lowest on each day from 91 observations.	Mean of 936 differences	Mean of the greatest on each day, 78 observations	Mean of the least on each day, 78 observations		General direction	Greatest pressure in the quarter	Mean for the quarter			
										During the quarter	Mean of 91 observations	During the quarter	Mean of 91 observations												
.	1845	29.731	83.2	29.5	60.5	44.2	16.3	51.9	46.5	115.6	80.0	12.2	36.3	54.9	54.1	5.4	12.0	0.9	—1.1	..	12.0	0.5	956	6.4	4.80
e ...	1846	29.740	87.0	33.3	63.9	46.7	17.2	55.2	48.3	116.5	86.6	21.0	39.1	*59.4	58.3	6.8	14.0	1.4	+2.3	..	11.9	0.2	655	6.3	5.54
	1847	29.713	85.3	24.3	60.6	44.3	16.3	52.2	44.1	114.8	79.2	14.5	34.9	56.2	54.3	8.0	15 7	1.7	—0.4	..	15.0	0.4	†849	6.6	4.59

* Mean of 81 observations.

† Mean of 7 weeks.

DEATHS in LONDON from all Causes, exclusive of Violent and Sudden Deaths.

Number of Weeks		1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
Spring Quarter	1845	884	888	910	878	848	789	808	798	868	818	802	757	756	10,804
	1846	969	820	931	832	785	820	781	802	804	812	776	776	817	10,725
	1847	912	1013	954	952	962	967	941	873	918	752	811	903	883	11,841
Mean Temperature	1845	44.6	40.4	45.3	51.2	53.8	44.5	50.6	47.5	53.1	58.7	64.1	62.2	58.3	51.9
	1846	46.8	45.5	50.4	45.5	48.4	55.2	51.8	54.2	57.6	64.6	66.4	69.5	61.2	55,2
	1847	36 8	47.9	42.6	45 5	48.1	49.1	56.1	58.4	63.4	62.3	54.4	56 0	57.8	52.2

DEATHS in Eight Quarters of the Years 1845—1847.

	Liverpool	Manchester	Birmingham
1845—September	1963	1363	694
December	1982	1413	777
1846—March	1934	1527	876
June	2098	1611	842
September	2946	2354	1627
December	2735	2318	1341
1847—March	3068	2185	1187
June	4809	2362	1263

REGISTRARS' NOTES.

The following Instruction was addressed to the 447 Registrars in the Country:—

"If at any time the number of deaths registered during the Quarter has been *above the average*, state, in a note at the foot of the Return, whether any epidemic disease, such as Measles, Typhus, &c., has been prevailing in the District, or if there be any other known circumstance which will account for the increase."

The Registrars alone must be held responsible for the opinions expressed in any of the subjoined Notes.

SUP. REG. DISTRICT	REG. DISTRICT	
MAIDSTONE	*West*	Deaths 70. The mortality of this district is about the average, except at the County Lunatic Asylum, where the deaths have amounted to 17, exactly the same number as were registered in that institution during the March quarter, while the average of the four quarters of 1846 was only $6\frac{1}{5}$. The increase of mortality there is ascribed to the influence of the cold and inclement weather which prevailed during the early months of the year on the infirm and exhausted constitutions of the patients, who form the great proportion of its inmates. Added to which, the want of a due proportion of vegetables, especially potatoes, appears to have impaired their general health; this being manifested by the occurrence of numerous cases of scurvy in the month of March, none of which, however, proved fatal, as they all speedily recovered under a change of diet.
BEDFORD	*Cardington*	Deaths 64. The deaths are slightly above the average, in consequence of a few cases of a malignant form of scarlet fever.
———	*Risely*	Deaths 22. Scarlet fever and hooping cough have prevailed in this district, proving fatal in many cases.
CAMBRIDGE	*St. Andrew the Less*	The deaths (82) are above the average, owing to measles and pneumonia among children.
———	*St. Andrew the Great*	Deaths 36: rather more than the average. Measles has been very prevalent, and in many cases fatal. A number of very old people have died this quarter.
———	*St. Giles*	Deaths 38: considerably above the average. Measles and pneumonia have been fatally prevalent during the quarter, and cases of phthisis unusually numerous.
ST. THOMAS	*Kenton*	Deaths 36. Pneumonia, bronchitis, and typhus, have been the prevailing diseases.
———	*Topsham*	Deaths 29. Measles has been the prevailing disorder among the children during the past quarter, but for the most part of a favourable kind; only 4 deaths from the effects of measles.
BATH	*The Abbey*	Deaths 82: being less than in the corresponding quarter of last year. Several cases of land scurvy have appeared in the neighbourhood, though not in this district; some in a class of the poor removed from want, but prevented by high prices from using potatoes and other vegetables. Citric acid, and the free use of vegetables, have proved sufficient in relieving this disease. There is reason to fear that a number of old persons have died of want, whose deaths have been registered as caused by old age, phthisis, or pneumonia.
———	*Lyncombe and Widcombe*	Deaths 106: being above the average. Old age and fever seem to account in some measure for the increased number. The fever has been acute synochus, the brain generally affected. Two or three cases of typhus have occurred. The sewers are an active cause of dyspepsia and fever in this district.
HEREFORD	*City*	Deaths 80: Measles prevalent in this district amongst children. 10 cases fatal.
SHREWSBURY	*St. Chad*	Deaths 71: a few cases of typhus brought over by the Irish vagrants this quarter.
———	*St. Mary*	Deaths 87: very near the average. A few fatal cases of typhus have occurred. A good deal of sickness prevails, but not fatally.
KIDDERMINSTER	*Bewdley*	Of 26 deaths, 14 occurred between 68 and 88 years of age.
DUDLEY	*Sedgley*	Deaths 215. This number is about 42 more than the average. The increase is caused by the mortality of young children from hooping cough, and inflammation of the lungs, and diarrhœa. Deaths from fever, 19; and small pox, 2.
———	*Dudley*	The number of deaths (281) is 91 less than in the previous one, but 93 more than in the corresponding quarter of last year, and still above the average. 206 cases are certified by medical attendants: 30 deaths were caused by fever.
WALSALL	*Bloxwich*	Deaths 34: being above the average. The increase was caused by a great mortality among young children, but from no epidemic disease or other known circumstance.
WOLVERHAMPTON and SEISDON	*Wolverhampton, Eastern*	Deaths 322: an excess of 146 above the average. The epidemics typhus, hooping-cough, measles, and scarlatina have prevailed, but not violently, in some of the less healthy parts of the district.
———	*Bilston*	Deaths 239: the greatest number since the Registration Act came into operation, and 86 more than in the corresponding quarter of 1846. The causes principally are measles, and hooping cough with inflammation of the lungs among children.

TABLE
OF THE
DEATHS

In 117 of the Districts of England (including the principal Towns): shewing the Number of Deaths Registered in the quarters ending June 30th.

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending June 30th — Years 1839	1840	1841	1842	1843	1844	1845	1846	1847
tal	6612800	41244	42074	39133	38569	40343	38977	40847	43734	51585
itto, exclusive of London	4664589	29917	30951	28366	28014	28595	27380	29423	32311	39224
Aggregate Deaths in the 11 Divisions of England.										
l London	1948211	11327	11123	10767	10555	11748	11597	11424	11423	12361
South Eastern..	218181	1037	1093	1131	1065	1162	1186	1121	1237	1363
South Midland .	155225	867	891	892	801	821	945	939	755	961
Eastern.....	128921	990	814	677	772	658	736	901	841	733
South Western .	327869	1661	1692	1692	1920	1658	1726	1696	1593	1737
Western	776002	4442	4797	4499	4691	4176	4599	4748	4499	5844
North Midland	234771	1316	1572	1392	1304	1316	1404	1513	1368	1551
North Western .	1530460	11761	11997	10112	9997	10650	9391	10305	12470	16692
York	691131	4366	4400	4020	4165	4625	4036	4580	5314	5427
Northern	328902	1977	2000	2020	1865	2054	1712	1823	2426	2639
Welsh	273127	1500	1695	1931	1434	1475	1645	1797	1808	2277
Districts.										
London....										
est Districts	301326	1706	1689	1569	1640	1805	1802	1843	1694	1724
rth Districts....	376396	1963	2037	2019	1957	2243	2231	2177	2231	2424
ntral Districts ..	374759	2355	2081	2170	1986	2304	2044	2056	2032	2164
st Districts	393247	2470	2218	2144	2182	2496	2433	2389	2372	2651
uth Districts....	502483	2833	3098	2865	2790	2900	3087	2959	3094	3398
Eastern Division										
idstone	32310	198	168	174	182	175	202	173	165	212
ghton.....	46742	213	251	286	198	292	217	218	302	282
of Wight.. ...	42547	161	166	229	216	176	191	194	174	198
tsea Island	53036	269	270	250	274	334	363	301	375	426
chester	23044	116	130	100	107	100	116	139	125	130
dsor	20502	80	108	92	88	85	97	96	96	115
Midland Division										
lliams	17051	85	81	90	93	60	67	83	76	94
combe	34150	200	218	217	201	198	229	192	129	185
ord	19701	92	98	93	83	85	77	86	111	80
thampton	28103	184	164	136	158	177	224	251	156	176
ford	31767	162	190	181	144	177	193	180	158	231
bridge	24453	144	140	175	122	124	155	147	125	195
Eastern Division										
hester	17790	108	125	85	111	99	105	126	100	129
vich	25254	163	145	106	142	118	161	178	171	149
wich.....	61846	600	442	362	391	339	343	406	437	355
mouth	24031	119	102	124	128	102	127	191	133	100
Western Division										
zes	22130	123	143	82	107	194	118	108	123	139
hester.....	23380	91	107	125	113	105	95	135	108	123
en	31333	171	188	188	181	142	186	164	181	187
homas.....	47105	206	194	200	216	185	220	231	195	205
outh	36527	192	143	162	264	206	209	225	184	191
uth.....	48062	213	253	232	325	203	244	214	201	235
ance	50100	214	188	232	291	250	221	204	208	240
.....	69232	451	476	471	423	373	433	415	393	417
Western Division										
pl.....	64298	400	581	479	433	384	424	419	379	400
n	66233	287	457	393	343	294	427	375	338	369
d.....	38920	190	209	194	174	188	245	203	182	192
enham	40221	186	199	181	294	197	191	199	177	216
ford.....	34427	154	193	159	182	196	207	168	187	208

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending June 30th — Years 1839	1840	1841	1842	1843	1844	1845	1846	1847
Shrewsbury	21529	131	150	130	150	117	139	118	132	158
Worcester	27130	175	158	155	140	172	129	150	139	196
Kidderminster	29408	133	154	121	118	155	169	279	131	196
Dudley	86028	467	545	543	504	441	468	551	596	691
Walsall	34274	189	175	177	211	191	174	180	220	252
Wolverhampton ..	80722	548	464	506	661	414	457	541	500	847
Wolstanton	32669	215	204	195	238	219	201	228	243	344
Birmingham	138187	899	892	774	775	735	871	858	842	1263
Aston	50928	284	267	272	264	276	298	292	269	320
Coventry	31028	184	149	220	204	197	199	187	164	192
N. Midland Division										
Leicester	50932	317	371	322	327	277	332	432	305	329
Lincoln	36110	189	233	194	190	205	180	202	205	211
Nottingham	53080	311	387	294	277	299	325	322	310	404
Basford	59634	312	379	342	302	325	358	351	339	384
Derby.....	35015	187	202	239	208	210	209	206	209	223
N. Western Division										
Stockport	85672	788	657	527	489	511	418	516	621	632
Macclesfield	56018	372	425	382	388	386	336	362	438	509
Gt. Boughton, inc. Chester	49085	347	372	278	325	291	236	291	312	322
Liverpool	223054	1729	2022	1751	1689	1914	1547	1611	2098	4809
West Derby, (adj. Liverpool	88652	414	460	488	525	558	524	584	828	987
Blackburn	75091	526	393	469	399	562	460	525	638	642
Preston	77189	449	839	448	475	507	463	481	587	627
Rochdale	60577	414	538	386	385	404	407	466	475	464
Bury	77496	542	604	573	444	492	495	436	531	626
Bolton	97519	830	729	631	553	676	616	643	689	812
Wigan.....	66032	427	563	401	349	477	486	358	654	668
Prescot	43739	224	317	270	287	248	197	234	284	474
Chorlton.....	93736	537	501	616	551	610	540	647	705	757
Manchester	192408	1778	1637	1357	1327	1447	1257	1324	1611	2362
Salford	70228	719	487	419	434	493	417	445	539	509
Ashton	173964	1665	1253	1116	1377	1074	992	1382	1460	1492
York Division										
Sheffield.....	85076	652	554	528	485	534	464	513	852	636
Huddersfield	107140	548	619	555	547	779	572	603	731	793
Halifax	109175	598	641	558	549	679	606	627	807	727
Bradford.....	132164	846	759	836	834	936	962	1106	1208	1109
Leeds & Hunslet‡	168667	1172	1138	1048	1165	1117	936	1177	1087	1492
Hull	41130	221	351	247	271	282	229	258	336	301
York	47779	329	338	248	314	298	267	296	293	369
Northern Division										
Sunderland	56226	392	363	343	345	333	307	303	452	369
Gateshead	38747	213	258	223	216	279	216	237	283	289
Tynemouth	55625	353	324	339	336	308	256	293	423	398
Newcastle-on-Tyne	71850	474	434	555	413	541	383	429	597	606
Carlisle	36084	191	201	221	211	195	197	203	241	433
Cockermouth.....	35676	164	177	157	156	190	166	174	218	288
Kendal	34694	190	243	182	188	208	187	184	212	256
Welsh Division										
Abergavenny	50834	321	362	305	293	312	332	352	358	535
Pontypool	25037	166	179	236	139	160	99	150	211	213
Merthyr Tydfil	52864	305	353	410	308	264	560	461	438	585
Newtown	25958	136	164	148	119	140	117	149	132	181
Wrexham	39542	218	240	245	193	266	219	214	244	263
Holywell.....	40787	208	208	233	186	205	208	280	220	267
Anglesey	38105	146	189	154	196	128	110	191	205	233

* The last quarter in London ended June 26th, 1847.

† The Mortality of the Districts of Wandsworth, and Lewisham, and Sub-District of Hampstead, is included in the above Table, in each of the nine years, though the deaths in Wandsworth did not appear in the Weekly Metropolitan Returns till 1844; nor those of Lewisham and Hampstead till 1847.

‡ The former District of Leeds is now divided into the districts of *Leeds* and *Hunslet*, both included in the present return.

A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES,

Registered in the Quarters ending June 1840-41-42-43-44-45-46-47.

CAUSES OF DEATH	Quarters ending June* YEARS 1840	1841	1842	1843	1844	1845	1846	1847
All Causes	10952	10595	10427	11621	11471	11267	11271	12361
Specified Causes	10921	10555	10387	11553	11432	11231	11235	12331
I.—Zymotic (or Epidemic, Endemic, and Contagious) Diseases	1947	1687	1611	2431	2451	1885	1787	2112
Sporadic Diseases:—								
II.—Dropsy, Cancer, and other Diseases of uncertain or variable Seat	1368	1248	1354	1224	1209	1193	1166	1315
III.—Diseases of the Brain, Spinal Marrow, Nerves and Senses	1962	1914	1873	1861	2006	1938	1987	1997
IV.—Diseases of the Lungs and of the other Organs of Respiration	3258	3441	3230	3442	3229	3478	3487	3726
V.—Diseases of the Heart and Blood Vessels	248	242	274	323	378	419	405	515
VI.—Diseases of the Stomach, Liver, and other Organs of Digestion	766	758	725	835	847	860	1012	1067
VII.—Diseases of the Kidneys, &c.	59	61	74	91	94	125	133	151
VIII.—Childbirth, Diseases of the Uterus, &c.	96	117	102	116	99	150	158	177
IX.—Rheumatism, Diseases of the Bones, Joints, &c.	91	56	69	104	82	85	134	161
X.—Diseases of the Skin, Cellular Tissue, &c.	15	14	20	13	12	25	32	51
XI.—Old Age	788	708	748	839	673	744	491	664
XII.—Violence, Privation, and Intemperance	323	309	307	274	352	329	443	395
I.—Small Pox	171	256	59	105	425	246	87	181
Measles	283	148	338	374	208	322	163	277
Scarlatina	518	133	196	325	601	201	177	174
Hooping Cough	296	537	408	625	361	463	545	392
Croup	96	103	126	89	126	83	67	50
Thrush	67	53	43	47	42	45	40	35
Diarrhœa	62	65	63	50	83	84	153	202
Dysentery	11	13	11	17	18	17	18	39
Cholera	4	1	7	8	9	2	9	4
Influenza	14	57	19	21	28	11	21	23
Ague	1	5	3	6	3	3	8	11
Remittent Fever	14	3	4	5	4	7	27	16
Typhus	330	253	266	690	455	308	364	568
Erysipelas	76	51	58	58	68	80	78	107
Syphilis	3	8	10	11	19	13	30	33
Hydrophobia	1	1	..	..	1	..	..	..
II.—Inflammation	77	52	54	39	7	..	..	..
Hæmorrhage	45	45	41	28	42	28	30	32
Dropsy	431	390	404	388	333	329	125	166
Abscess	69	31	42	16	20	15	16	11
Noma	..	..	..	..	..	1	2	1
Mortification	69	52	44	53	46	60	34	29
Purpura	3	5	5	1	3	4	9	25
Scrofula	29	36	25	36	43	41	77	73
Cancer	100	102	113	130	170	151	191	193
Tumor	23	23	19	8	7	2	..	4
Gout	10	16	14	16	19	15	16	14
Atrophy	71	71	91	102	137	136	235	291
Debility	244	254	312	224	236	242	255	286
Malformations	12	12	7	19	22	17	47	40
† Sudden Deaths	185	159	183	164	124	152	129	150
III.—Cephalitis	171	180	142	176	153	144	147	173
Hydrocephalus	474	491	452	485	497	456	443	407
Apoplexy	180	212	192	251	294	252	329	317
Paralysis	189	166	204	219	213	191	246	255
Convulsions	744	650	683	540	614	641	514	526
Tetanus	4	6	3	2	7	7	5	3
Chorea	1	4	1	2	2	3	1	1
Epilepsy	58	46	41	52	55	49	90	101
Insanity	12	9	12	11	18	16	29	31
Delirium Tremens	27	24	19	21	29	23	33	35
Disease of Brain, &c.	93	125	124	102	124	156	150	148

CAUSES OF DEATH	Quarters ending June* YEARS 1840	1841	1842	1843	1844	1845	1846
IV.—Laryngitis	9	9	3	11	17	12	28
Quinsey	18	117	10	27	23	14	16
Bronchitis	110	38	117	190	194	272	510
Pleurisy	20	21	26	30	19	28	40
Pneumonia	830	744	752	840	715	869	705
Hydrothorax	50	47	54	56	67	54	47
Asthma	194	207	174	191	161	203	150
Phthisis or Consumption	1879	2062	1913	1884	1838	1819	1850
Disease of Lungs, &c.	148	196	181	213	195	207	141
V.—Pericarditis	8	7	10	21	29	29	20
Aneurism	15	8	3	8	14	11	11
Disease of Heart, &c.	225	227	261	294	335	379	374
VI.—Teething	213	194	203	199	165	163	114
Gastritis	214	212	182	169	11	19	20
Enteritis					169	143	106
Peritonitis	17	20	17	21	29	37	54
Tabes Mesenterica	58	51	66	104	125	128	202
Worms	4	4	5	2	6	4	22
Ascites	10	4	6	16	17	14	24
Ulceration (of Intestines, &c.)	11	16	20	20	9	32	40
Hernia	27	21	18	31	23	25	28
Colic or Ileus	16	23	31	24	32	31	39
Intussusception	5	4	1	9	7	11	18
Stricture	10	9	3	4	3	6	11
Hæmatemesis	1	4	6	11	10	11	16
Disease of Stomach, &c.	56	43	41	60	74	65	82
Disease of Pancreas	..	..	..	..	1	1	1
Hepatitis	8	13	12	22	22	24	48
Jaundice	20	27	27	27	39	27	30
Disease of Liver, &c.	95	112	84	116	105	117	154
Disease of Spleen	1	1	3	..	..	2	3
VII.—Nephritis	4	5	4	6	9	4	11
Ischuria	3	4	2	..	..	..	2
Diabetes	4	3	4	4	3	7	9
Cystitis	4	5	1	3	2	5	11
Stone	6	5	5	3	5	10	7
Stricture	2	3	8	13	16	12	8
Disease of Kidneys, &c.	36	36	50	62	59	87	85
VIII.—Childbirth	73	71	71	94	67	104	102
Paramenia	1	2	3	2	3	1	4
Ovarian Dropsy	6	4	..	5	6	8	15
Disease of Uterus, &c.	16	40	28	15	23	37	37
IX.—Arthritis	..	2	..	1	1	2	2
Rheumatism	33	26	41	34	27	31	79
Disease of Joints, &c.	58	28	28	69	54	52	53
X.—Carbuncle	..	..	1	1	..	3	..
Phlegmon	..	2	2	..	2	2	6
Ulcer	5	5	5	2	7	4	12
Fistula	7	2	3	6	1	5	5
Disease of Skin, &c.	3	5	9	4	2	11	9
XI.—Old Age	788	708	748	839	673	744	491
XII.—Intemperance	7	13	4	4	13	15	20
Privation	4	4	1	4	6	3	6
Violent Deaths	312	292	302	266	333	311	417
Causes not specified	31	40	40	68	39	36	31

* The mortality of the district of Lewisham, and sub-district of Hampstead, was included in the Metropolitan Returns at the commencement of 1847, for the first Therefore the deaths for previous years are not contained in the above table. In the Quarters ending June they were respectively (1840) 171; (1841) 172; (1842) (1843) 127; (1844) 126; (1845) 157; (1846) 152.

† Under the head of *sudden deaths* are classed not only deaths described as sudden, of which the cause has not been ascertained or stated; but also all deaths ret by the coroner in vague terms, such as "found dead," "natural causes," &c. &c.

SUP. REG. DISTRICT	REG. DISTRICT	
WOLVERHAMPTON and SEISDON	*Willenhall*	The number of deaths is 116, being the greatest number registered in any one quarter since the commencement of the Registration Act. Typhus and scarlatina extensively prevail in a part of the district owing to bad sewerage, a bad supply of water, and a constant accumulation of filth. 71 of the above are of children under 5 years of age.
WOLSTANTON and BURSLEM	*Tunstall*	Deaths 147: considerably above the average; pneumonia, bronchitis, and measles having carried off many children under 2 years. 24 occurred in the union workhouse, a number much above the average. The district is still unhealthy.
———	*Burslem*	Deaths 156: being an increase of 51 on corresponding quarters.
BIRMINGHAM	*St. George*	The number of deaths (244) is 52 more than in the corresponding quarter of last year. 29 were from phthisis, 15 from hooping cough, 19 from bronchitis, 8 from typhus, and 15 from pneumonia.
———	*St. Mary*	Deaths 328: the greatest number registered in one quarter since the Registration Act came into operation. 70 were caused by fever. The increase has been chiefly from deaths in the workhouse, where the number was 179 (being 129 above the average,) and a great portion from fever.
NOTTINGHAM	*St. Ann*	Deaths 161: being 82 above the average of 5 corresponding quarters. This enormous increase is attributable to typhus and other fevers introduced into the district by the extraordinary number of tramping Irish. There have been several cases of chicken pox. I have traced several instances of small pox to two Irish women who had recently arrived, and whose children were already infected with this malignant disease, and from this source all the later cases have arisen. None of the children had been vaccinated, owing to the prejudice existing against this precaution, which prejudice however is fast dying away. So well has the Vaccination Act been carried out in Nottingham, that not a single case had occurred in this district for some time, until the arrival of it with the Irish immigrants. The increase in the number of deaths may also be attributed to a want of provisions, particularly of vegetables, the insufficiency of employment, and the dirty state of the dwellings, (a vast number of which are not supplied with water,) which have produced the sea scuvy, and other complaints.
BASFORD	*Bulwell*	The number of deaths (62) does not quite equal the number of last quarter, though one-third above the average of the corresponding quarters in 1845 and 1846. Much sickness prevails in the populous parts of the district arising chiefly from the poverty consequent on the depression of trade, but which is considerably mitigated by the efficient medical relief provided, so that though epidemics, as typhus, &c. exist, their influence is very much checked.
———	*Greasley*	The number of deaths (91) is 18 above the number registered in the corresponding quarter of 1846. There has been an increased mortality amongst young children, principally arising from inflammatory and other affections of the nervous centres. Consumption has proved fatal in 11 cases, and 6 deaths have taken place from typhus, showing a considerable diminution in the deaths from this cause, when compared with the returns of last quarter.
STOCKPORT	*Stockport (First)*	The number of deaths (236) is above the average of corresponding quarters. Measles has been prevalent, and in many cases fatal.
———	*Hyde*	Deaths 105: rather above the average. Those from phthisis numerous. Fever has been prevalent.
———	*Heaton Norris*	Deaths 119: being 21 per cent. above the average of the same quarter in 1845, but rather less than that of 1846. It is astonishing that the mortality is not higher, considering the prevalence of fever, and the distress of the poor from want of employment and dearness of provisions, a suffering unequalled in the memory of the oldest man living. A cordwainer, aged 51, died of "chronic affection of the lungs aggravated by deficient food and impure air." A handloom weaver, 64, of "an affection of the lungs (1 month) materially aggravated by want of proper food." Three persons died from confluent small pox, the first in a cellar, vaccinated 4 years and 10 months before death, the second in the house above it, and the third (natural small pox) in the street adjoining; the first two were Irish, the last English. Typhus has been prevalent, the consequence of Irish immigration. Such was the influx of these poor creatures, that to prevent the spread of pestilence in the establishment, the Board of Guardians converted the Heaton Norris old workhouse into a fever hospital, thus cutting off all communication with the ordinary sick from those who showed the least symptom of fever. Doubtless, many lives have thus been saved, for by such arrangement, and the medical care of Dr. Rayner in this hospital, only four died of typhus fever. In 27 deaths there was no medical attendance.
———	*Hazelgrove*	Deaths 26: being above the average. Only one case of typhus, but very malignant. The district, I am told at this time, is very healthy. Means are being used at present to remove the cess pools, and other nuisances, which have been certified by two medical gentlemen as highly injurious to the health of the inhabitants. This is being done in those places where the typhus has been most prevalent, and we hope therefore to have less of it in future.
MACCLESFIELD	*East*	Deaths 124: the number exceeds that of the last quarter (which was above the general average) by 12. The increase must be attributed to typhus fever, which has been and still is very prevalent. Mr. Bland, the medical officer for the Macclesfield district, informs me, that he has had no less than 200 fever cases from the 25th of March last to the 25th of June.
———	*West*	The deaths (159) are above the average, owing in a great measure to a number of persons having been taken to the workhouse from various parts of the union almost *in articulo mortis*. There have been 9 cases of typhus, only 3 of which were, so far as I have been able to ascertain, of a malignant character; the virulence of the complaint having been checked by the precautionary means used by the authorities.
———	*Bollington*	The 69 deaths registered this quarter are above the average, still there has been no epidemic prevalent in the district to which the increase can be attributed.
———	*Prestbury*	The number of deaths (36) exceeds any quarterly number hitherto returned. The excess is partly caused by the increase of the population in a portion of the district, and partly by the prevalence of typhus and scarlet fevers.

SUP. REG. DISTRICT.	REG. DISTRICT	
GREAT BOUGHTON	*Cathedral Division*	Deaths 133: fever has been, and still is, very prevalent in the city of Chester. There are, however, on the whole 41 deaths less than were registered last quarter.
LIVERPOOL	*Saint Martin*	Deaths 661. This return is considerably above the average, and 203 more than in the corresponding quarter last year. Typhus and diarrhœa have been the prevailing diseases. The former is carrying off numbers daily; it is chiefly confined to the lower order of the Irish, by whom this town is completely overrun. There have been more deaths than usual from small pox, but this disease, with a few exceptions, is also confined to the same class of people.
———	*Great Howard Street*	Deaths 1080. This return shows a very great increase of mortality in the district. Last quarter I explained the cause of the increase of deaths up to the end of March. I have now to state that the same disease—"the Irish fever"—has been raging among the poor with increased mortality. The numbers of destitute Irish who continue to arrive in this port, exceed those of last quarter; and they are still pouring in by every packet, to the great detriment of the health and business of the town. Tradesmen, with increased poor rates, are complaining of the absence of all strangers (who at this time of year visit this place in great numbers), and believe that the fever deters them from coming. The select vestry, after encountering almost insurmountable obstacles, have obtained from government the quarantine ships and one sixty-gun frigate, which they have fitted up as floating hospitals, to which the fever patients are removed, as far as they can be accommodated; and they also have fitted up spacious and commodious warehouses for a similar purpose; but still their powers and means are insufficient to cope with so formidable an antagonist. The state of the town in respect to the privies is a disgrace to all concerned. The benefit of Lords Lincoln and Morpeth's bills will be here appreciated. I am informed by all the medical men whom I have consulted on the subject, that the state of the privies alone is sufficient to engender as pestilential an epidemic as the fever which is now killing so many Irish; and that if the present hot weather should continue, and no improvement be made in the contractors' arrangements, we may expect the disease to extend to the middle and upper classes of the inhabitants. Eight Roman Catholic priests have fallen victims to their indefatigable attentions to the poor of their church, and one clergyman of the church of England. Another (curate of St. Martin's) nearly fell a sacrifice to the same disease Indeed, their exemplary conduct in visiting and relieving the sick has been the theme of praise with all. From 10 to 15 persons connected with the relieving department in the parish offices have also died of the fever, taken by them in discharge of their duties. The health of the English inhabitants continues good, indeed above the average, and the fever is at present confined to the Irish locality.
———	*Dale Street*	Deaths 809: an excess over the previous quarter of 230, entirely owing to increase of fever amongst the lower order of Irish. 280 were from fever, and 40 from small pox.
———	*St. Thomas*	The deaths (598) are very considerably above the average this quarter, in consequence of the very alarming increase of fever. Mr. Homer, the registrar, fell a victim to typhus after one week's illness. Fever was fatal in 173 cases; small pox in 13.
———	*Mount Pleasant*	Deaths 1007: including 690 in the workhouse, 51 at the infirmary, and one at the lunatic asylum. There is attached to the workhouse a large fever hospital, which will hold about 128 persons; and there has also been very recently erected (for the reception of the Irish paupers) 3 large buildings or sheds, which will hold about 300 persons, all of which are quite full of patients at the present time. The deaths this quarter exceed the former quarter by 499, owing entirely to the great influx of Irish paupers into Liverpool. There were 276 fatal cases of fever, 144 of dysentery, 96 of diarrhœa, and 15 of phthisis, in the workhouse. There have also been 33 fatal cases of fever in this district, independently of the above public institutions.
———	*Islington*	Deaths 466: There is an increase of 193 deaths over the corresponding quarter of 1846, principally to be attributed to the great increase of fever, measles, small pox, diarrhœa, dysentery, phthisis, and pneumonia. From fever, in April, 10 died; in May, 36; in June, 52: total, 98, almost all residents of the town.
———	*St. Georges*	The number of deaths (188) exceeds that of any preceding quarter, and shows an increase over the corresponding quarter of last year of 88. To the prevalence of fever (of which 22 have died), diarrhœa, bronchitis, measles, and hooping cough, principally among the poor Irish families who have lately come over here in such vast numbers, may be attributed this unusual increase of mortality.
WEST DERBY	*West Derby*	Deaths 227. There has been an increase of 55 in the number of deaths during the past quarter. The principal cases have arisen from typhus and consumption; and fever continues prevalent in this district. 46 persons died of typhus.
———	*Everton*	Deaths 238. From typhus fever, 44 cases; measles, 22.
———	*Toxteth Park*	The number of deaths this quarter (431) is an increase of 35, compared with March quarter, 1847. Typhus is on the increase, which may be attributed in a great measure to some of the confined streets, courts, and cellars, which are not fit for individuals to live in; and to the number that are allowed to inhabit the cellars. From typhus there were 29 deaths.
BLACKBURN	*Blackburn*	The deaths (345) are above the average; much fewer, however, than in the two preceding quarters. Scarlatina and typhus still prevail.
———	*Great Harwood*	Deaths 40: 8 had no medical attendant.
PRESTON	*Walton-le-dale*	The number this quarter is 54, and the general average 45. The increase is caused by consumption, which has carried off 17 persons, and not by any epidemic; for though typhus, measles, and scarlatina have prevailed to some extent in the district, only 3 (one of each) cases have proved fatal. Of the 54 deaths, 30 were certified, 3 not certified, and 19 had no medical attendant.
ROCHDALE	*Castleton-within-the-Borough*	Deaths 82: being 20 above the usual average. Measles and small pox are prevalent. 9 deaths from typhus fever, arising from the continual influx of the Irish, who are generally in a filthy and destitute state.

SUP. REG. DISTRICT	REG. DISTRICT	
ROCHDALE	*Wardleworth*	The number of deaths (102) is above the average, in consequence of the great influx of Irish poor, whose destitute and filthy condition brings on fever; several of them have died of typhus.
BURY	*Elton*	This return (57 deaths) is rather more than the average. There were several fatal cases of scarlatina, though the number of deaths from this disease is only about half that of last quarter.
——	*Holcombe*	The number of deaths (46) is 21 above the corresponding quarter of last year, and 66 per cent. more than the average of the preceding 9 years, being principally attributable to the prevalence of typhus and scarlatina.
——	*Tottington, Lower End*	The number of deaths (36) is above the average, and 16 more than in the corresponding quarter of 1846. The increase has been caused by scarlatina, measles, and hooping cough.
BOLTON	*Eastern*	Deaths 215: being 55 more than the average of the corresponding quarterss of last year. Measles, scarlet fever, and hooping cough, with typhus and other fever amongst the Irish immigrants, have been the prevailing epidemics. There have been an unusual number of cases of small pox without previous vaccination, principally in Irish families recently arrived here. The greatest portion of the increase in the number of deaths in this district is owing to the influx of Irish.
——	*Western*	The number of deaths (175) is above the average of the corresponding quarters of other years, owing to the prevalence of typhus for the last 6 weeks, 16 fatal cases happening during that period. These have taken place amongst the poorest class, and amongst the most destitute, principally in common lodging-houses. Nine of them were of Irish, who had resided only a short time in the town.
——	*Little*	The number of deaths (131) is rather more than the average of the corresponding quarters of former years. Epidemics have rather been and still are on the increase. Fever has been prevalent, but it has been chiefly confined to the destitute Irish, and is of a very contagious and malignant kind. It has proved fatal in 3 cases only. 12 deaths have occurred from scarlatina. There is cause for apprehension that the Irish fever will soon be rapidly on the increase among the lower classes in this neighbourhood, if they are not assisted with more nourishing food than they have lately been able to procure. We have consequently, in order to prevent as much as possible the spread of such an awful epidemic, actively applied fumigation and limewash to houses, and cleansed those parts of the town least ventilated and most densely populated.
WIGAN	*Wigan*	Of the 311 deaths, 33 have been from small pox without previous vaccination, and 24 from typhus; 67 were without any medical attendant. The great mortality of this town can only be attributed to the extremely filthy state of the streets, courts, and dwellings of the poor.
——	*Pemberton*	The number of deaths (84) this quarter is 33 more than in the corresponding quarter of last year. Small pox is very prevalent in one part of the district, but has only proved fatal in 6 cases. The diseases most prevalent and fatal are typhus and consumption.
——	*Ashton in Makerfield*	Deaths 71: more than double the average number, 27 more than in the corresponding quarter of 1846, and 47 more than in the same quarter of 1845. Of the 71 deaths this quarter, 15 have been from measles, and 4 from scarlatina. Typhus has prevailed, but only fatally in 3 cases.
——	*Upholland*	Deaths 47: being 41 per cent. above the average of the quarter. The principal cause of the increase, is the great influx of population during the construction of the Liverpool and Bury Railway.
PRESCOT	*Rainford*	Deaths 12: scarlatina and typhus prevail.
——	*Prescot*	Deaths 180. This district has been in a very unhealthy state during the past quarter, and the number of deaths registered is nearly 3 times the average. There have been 54 fatal cases of typhus, principally among the poor Irish, who have, during the quarter, inundated the town and neighbourhood. In the workhouse there are yet about 130 cases of fever on the list, and every thing has been done for them, and is still being done, that humanity can suggest, or medical skill prescribe.
——	*Much Woolton*	Deaths 43. This is the greatest number ever yet registered in this district. 21 have been of the poor Irish, who have thronged here in great numbers; 7 were from small pox. There is every reason to believe that the deaths in this district would have been considerably increased but for the timely interference of the authorities in removing large quantities of fever patients to the hospital provided by the Board of Guardians. There are still small pox, without vaccination (among the Irish,) hooping cough, and typhus fever in the district.
CHORLTON	*Chorlton upon Medlock*	Deaths 184: from fever 23 deaths have been recorded; 13 occurred in the fever ward, a temporary accommodation for the pauper cases belonging to the various districts which form the Chorlton Union. Taking into consideration the privations the half-worked and unemployed have had to endure, the health of this district must be deemed satisfactory, as the number of deaths only exceed by two the corresponding quarter of 1846.
——	*Ardwick*	Deaths 137. Typhus and small pox are both prevalent in the district.
——	*Ancoats*	The total number of deaths registered this quarter is 437, which is an increase of 27 per cent. on the number registered in the corresponding quarter last year, and 64 per cent. more than the average for the same quarter in the years 1841—2—3—4—5. In the month of April, 141 were registered (7 from fever); in May, 164 (10 from fever); and in June, 132 (23 from fever). These figures will show that this quarter's excessive mortality cannot altogether be attributed to the prevalence of the epidemic fever; and as no other disease has been particularly fatal, the chief cause will most likely be found in the fact, that the working classes not having had a sufficiency of the requisites of life, have been much more susceptible of disease in general. The return of the number of cases of fever registered, gives a very inadequate idea of the extent to which it has prevailed, because, when practicable, such cases are removed to the fever hospitals, none of which are situated in this district. It may be worth observing, that very few of the Irish immigrants have come into this district, so that this, which is such a fertile cause of fever in other places, has had comparatively little influence here.

SUP. REG. DISTRICT — REG. DISTRICT

MANCHESTER ..... *St. George*..... The number of deaths is 355, being 44 below the preceding quarter, and 117 above the corresponding quarter of last year. From fever, 30; from small pox 15. The number of deaths registered from fever is no criterion whereby to judge of the real amount of fever in the district, as the cases are removed, as soon as possible, to the fever hospitals situated in other parts of the town. Deaths from measles continue numerous. Small pox has been prevalent, and the deaths, with one exception, have been among children who have not been vaccinated.

——— ..... *Market Street* ..... 711 deaths have been registered. A great increase of mortality as compared with the corresponding quarter of 1846, which gave only 322 deaths. This is, perhaps, altogether attributable to the extraordinary number of Irish persons, men, women, and children, naked, hungry, and diseased, who have inundated this country, especially the various districts of South Lancashire and the adjoining counties, during the present year. The board of guardians have been under the necessity of providing additional premises, and that to a large extent, for the reception of destitute and diseased applicants. In this district alone a fever hospital has been provided in Long Millgate, and also an auxiliary workhouse in Tib-street, formerly used as barracks for soldiers. The average number of inmates in the workhouse, New Bridge-street, in the second quarter of 1846, was 1200, and the number of deaths registered was 107. The average number of the quarter just expired was nearly 1600, and 199 deaths were registered. The average number of persons in the Tib-street workhouse for the quarter ending June 30, 1847, was 540, and 123 deaths were registered. In the fever hospital, Long Millgate, the average number of patients has been 225; deaths registered, 133. Further, at the Royal Infirmary, 30 deaths have been registered. For the whole district of Market-street, exclusive of the above, 195 deaths were registered; a number not in excess as compared with the corresponding quarter of last year.

——— ..... *London Road* ..... Deaths registered during the quarter 289. This number exceeds that of the June quarter, 1846, by 9; of June, 1845, by 73; of June, 1844, by 95. The great increase has been caused by fever, amounting, during the past quarter, to nearly 28 per cent. of the entire deaths. The average of the corresponding quarter of the three previous years was not above 6¼ per cent. Of small pox there have been 10 cases, more this than double the average of the same quarter for 1846, 1845, 1844. Besides the great prevalence of fever and the greater number of deaths from small pox; bronchitis, and pneumonia (of each about 10 cases), have been more than usually fatal for the season. Consumption, which in previous corresponding quarters was 13 per cent. and upwards, has this quarter reached only 10 per cent. of the entire deaths. Measles, scarlatina, and hooping cough, have all been below the average.

No. of deaths registered in June quarter,				Principal causes of death.	Proportion per cent. in the corresponding quarter,			
1847	1846	1845	1844		1847	1846	1845	1844
80	15	11	16	Fever	27.73	5.38	5.09	8.25
30	38	29	26	Phthisis	10.40	13.62	13.42	13.40
18	26	14	8	Convulsions	6.24	9.32	6.48	4.15
10	6	3	3	Small pox	3.46	2.15	1.39	1.54
9	13	4	6	Asthma.....	3.12	4.66	1.84	3.09
9	6	16	7	Measles	3.12	2.15	7.40	3.61
5	13	1	5	Scarlatina	1.73	4.66	0.46	2.58
4	14	10	2	Hooping cough	1.39	5.02	4.63	1.03
165	131	88	73	8 principal causes of death	57.19	46.96	40.71	37.65
124	159	129	121	All other	42.97	53.04	59.29	62.35
289	280	217	194	Total from all causes.....	100.	100.	100.	100.

——— ..... *Deansgate*..... The number of deaths (362) during the quarter just passed, is about 100 higher than the average. Still the infant mortality constitutes nearly one half of the total: the deaths being, under 1 year, 77; between 1 and 2 years, 48; 2 and 3, 19; 3 and 4, 14; 4 and 5, 10; total, 168: being only 13 less than half the total deaths. If with many writers we include fever amongst the exanthemata, the deaths from this class of diseases will be 70, viz.:—typhus, 31; small pox, 13; measles, 18; scarlet fever 8; total, 70. This number by no means represents the mortality from this class of diseases originating in this district, since most of the cases have been removed to the various fever hospitals in the town, none of which are situated here. The fever is of an exceedingly low type, the subjects of it becoming typhoid, with dry brown tongue, within very few hours after the attack. In many, the brain is oppressed from the beginning, the pulse continuing slow (ranging from 70 to 80) throughout, the pupil being large, whilst in some there is great abdominal irritation, vomiting and diarrhœa ushering in the attack. This is followed by great tenderness over the abdomen, intolerance of pressure, and considerable distension from flatus. So far as my own observation has extended, and as far as can gather from my professional friends, I think it may be stated generally that the mildest treatment has been the most successful. The present epidemic is essentially a famine fever, imported into this country by a class reduced to the lowest condition consistent with the carrying on of the vital processes. In such a state of the system, general derangement takes place, the body lives upon itself, furnishes its own materials for respiration, abnormal products are formed, partly retained and partly eliminated, producing disease in the system which forms them, and communicating it by the eliminated matters to others. Want compels the destitute to live together, whilst the deficiency of water, and the great personal uncleanliness of the Irish poor give to their sordid skin a morbid coating, and the tainted air they breathe, carries its poison abroad, and the well fed and the wealthy fall victims to the famine they felt not. A better supply of good food, a greater abundance of pure water, the separation of the poor from each other, by removing them from the low lodging-houses in which they congregate, often to the number of 18 or 20 in a single room, and the inculcation of greater cleanliness by the priesthood of all denominations, will, better than all mere medical treatment, subdue the fever which is now sweeping so many to the grave. The number of certified cases this quarter (211) is considerable, still it leaves a large number (151) to have had no scientific or skilled assistance during the illness that

SUP. REG. DISTRICT	REG. DISTRICT	
MANCHESTER	*Deansgate (continued)*	has proved fatal to them. The medical officers of the union and of the children's dispensaries complain that even in most of the certified cases the children were brought to them in a dying condition. To the apathy that prevails respecting their offspring, or to the marvellous confidence in unskilled advice, which the poor so generally entertain, must this be attributed. They have a strange belief in intuitive knowledge. My friend, Dr. Howard, I may remark, has informed me that nearly all the cases of fever he has had in the fever hospital of this town have been distinctly maculated.
MANCHESTER	*Cheetham*	Deaths 61: being above the average. 3 cases of typhus fever were registered, which is a very unusual circumstance.
SALFORD	*Greengate*	Deaths 255: about 40 above the average of the summer quarters. 9 of the deaths from fever occurred in the workhouse fever-ward, and one in the dispensary; the remaining 7, without exception, in streets and courts, which are badly sewered or confined in situation,
ASHTON and OLDHAM	*Ashton Town*	Deaths 238: being above the average. Typhus has prevailed to a greater extent than at any time during the registration, and caused 30 deaths. Nearly half the cases of typhus are of poor Irish, some of them having only arrived a few days before, and all have taken place in streets, &c. without any efficient drainage.
———	*Dukinfield*	Deaths 257: 24 more than in the corresponding quarter of 1846. Measles, scarlatina, typhus fever, and pulmonary diseases, have been prevalent.
———	*Oldham above Town*	Deaths 201: a larger number than has been registered in any corresponding quarter, the average being about 158. This increase arises from the prevalence of typhus, of which there have been 15 fatal cases, 11 of them in the fever ward in this district; and from scarlatina, 22 having died of that disease.
SHEFFIELD	*North*	Deaths 255: of which 36 were from fever.
HUDDERSFIELD	*Huddersfield*	Deaths 242: considerably above the average, (but below the number registered last quarter,) on account of the typhus fever raging to a great extent this quarter, 25 deaths having been registered from typhus, and 8 from scarlatina. The mortality amongst the Irish people has been considerable this quarter, many of them dying after a short residence in the district. Their first appearance shows great debility.
———	*Newmill*	The present number (39) shows an increase of 10 on the corresponding quarter of 1846. Hooping cough and typhus have somewhat prevailed.
———	*Honley*	The number of deaths (55) is about 20 more than were registered in the corresponding quarters of 1846. 6 died of typhus, and 9 of scarlatina; but in this district the fever is very considerably abated.
———	*Lockwood*	Deaths 58; being more than the average. Typhus and scarlatina have prevailed more or less in this district for a considerable time, and several deaths have occurred during the last quarter in consequence thereof, but these alarming visitations of fever have somewhat subsided within the past month.
HALIFAX	*Halifax*	Deaths 231: being 32 more than in the corresponding quarter of last year. From fever 17, and diarrhœa 11. There have been 60 deaths registered in the workhouse this quarter, 18 having been the highest number previously since the commencement of the union workhouse.
———	*Elland*	Deaths 81: making 18 above the average of the corresponding quarter of the last three years. The district is now becoming more healthy. Fever is subsiding, which still maintains an endemic character, and prevails chiefly in the highest part of the district. Amongst the aged, the fatality has been very great.
BRADFORD	*Cleckheaton*	Deaths 71: the largest number registered in one quarter since the commencement of the registration, 6 more than the last quarter, and 15 more than in the corresponding quarter of last year, hooping cough being prevalent in most parts of the district.
———	*Wilsden*	Deaths 31: being about the average. There have been six fatal cases of typhus and one of scarlatina this quarter.
———	*Drighlington*	Deaths 38: the excess of deaths above the previous quarter is chiefly attributable to the prevalence of hooping cough and convulsions among infants.
LEEDS	*North*	Deaths 380. The number of deaths for the past quarter is two-thirds more than in the corresponding quarter of last year. The district is at present in a very unhealthy state. During the quarter no less than 100 persons have died from typhus, and a great many from scarlatina. From small pox 11 died (10 without previous vaccination).
———	*West*	Deaths 255: being 55 fewer than those registered in the preceding quarter. Unfortunately the deaths of four Catholic clergymen were registered during the last quarter; all of them died of typhus, and in the same house, and in all the cases the informants attribute their deaths to infection caught in the north district amongst the Irish.
———	*South East*	The number of deaths (244) is 10 less than in last quarter, and 55 more than in the corresponding quarter of last year. Typhus, scarlatina, hooping cough, and small pox have been prevalent and fatal in this district.
HUNSLET	*Holbeck*	Deaths 152. Hooping cough, pneumonia, and scarlatina have been prevalent.
———	*Chapeltown*	The number of deaths (38) is above the average, attributable chiefly to the prevalence of measles and hooping cough among children. These diseases have now abated.
———	*Whitkirk*	Deaths 34: the quarterly average for 10 years is 17. 21 were of children not exceeding 11 years, principally caused by scarlatina and bronchitis.
KINGSTON-UPON-HULL	*Myton*	The number of deaths (179) is 19 less than in the corresponding one of last year, and about 40 below the average. There is a large decrease of the mortality of children under one year old. Unfortunately fever is now prevalent in the district occupied by the lower classes of the Irish, and 13 cases have been registered during the month of June.

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YORK	*Micklegate*	Deaths 96: being much above the average, probably attributable to the following diseases: typhus, 2; scarlatina, 6; scarlatina and typhus, 2; diarrhœa, 4; erysipelas, 2; inflammation of bowels, 3; inflammation of lungs, 1.
———	*Bootham*	The number of deaths (90) is rather more than the average. There were a few cases of typhus, and other fevers, but not to any great extent.
———	*Walmgate*	Deaths 133: being more than the average, occasioned principally by the large number of Irish resident in the district. There have been 6 cases of scarlatina, all of the resident population; 10 of small pox, 9 of which are of Irish children, who have not been vaccinated; 11 of fever, nearly all Irish.
TYNEMOUTH	*Tynemouth*	The present return (119) is 6, in excess, above the largest number registered in any former quarter, with the exception of the corresponding quarter of 1839. This district has had a small influx of Irish poor, and some cases of fever are occurring, but no deaths (from any cause) have yet taken place amongst them. Of the whole number of deaths (119) registered, 107 are in the township of Tynemouth, and although the village of Tynemouth forms a very considerable portion of the said township, from its large and increasing population, only 3 deaths have occurred, a proof of its great salubrity. The modern part of the town of North Shields is in the township of Tynemouth.
———	*Earsden*	Deaths 44: there have been 8 cases of scarlatina registered this quarter.
NEWCASTLE-UPON-TYNE	*All Saints*	Deaths 167. The population of this district has increased much since January, in consequence of a great influx of railway workmen, and also from the destruction of tenement property in other parts of the borough, so that the above number of deaths is scarcely more than a fair average. Nearly all the deaths (15) from scarlatina, hooping cough, and typhus, occurred in Sandgate and neighbourhood, where, from the great number of common lodging-houses, these diseases are scarcely ever absent.
CARLISLE	*St. Mary*	Deaths 201: the greatest number registered in any quarter since the commencement of the Registration Act, being 96 more than in the corresponding quarter of last year. Measles has been very prevalent, and fatal in 50 cases. 114 deaths are of children under 5 years of age.
———	*St. Cuthbert*	Deaths 154: the greatest number since the Registration Act came into operation, being 20 more than in last quarter, and 73 more than in the corresponding quarter of last year. Measles was very prevalent in the first two months; 36 deaths were registered from that disease. Typhus is also prevalent at present, and proved fatal in 9 cases in the last month.
———	*Stanwix*	Deaths 25: there are 12 more than in the corresponding quarter of last year; scarlet fever and measles prevailing.
———	*Dalston*	Deaths 24: being above the average. Scarlatina and hooping cough have been prevalent, chiefly confined to children; in other respects the district is healthy.
COCKERMOUTH	*Cockermouth*	Deaths 79: being above the average for this district. There has been a great deal of sickness in Cockermouth for the last 9 months. Typhus, diarrhœa, dysentery, and scarlatina have been prevalent.
———	*Workington*	Deaths 84: this return is above the average, chiefly owing to the prevalence of fever.
———	*Maryport*	The number of deaths registered is 98, being considerably above the average. Scarlatina still prevails; 47 occurred under 5 years of age.
KENDAL	*Kendal*	Deaths 111. Typhus fever has nearly subsided in this district, one death only having taken place during the past quarter. The deaths from scarlatina are 10.
———	*Grayrigg*	Deaths 25: being above the average. Scarlatina and hooping cough have prevailed in the district.
———	*Milnthorpe*	Deaths 33: being less than the average. The mortality of this district is greatest in the June quarter.
———	*Kirkby Lonsdale*	The number of deaths is 49, being an increase of 11 over the preceding quarters. The prevalent epidemic has been scarlatina, from which there were 6 deaths.
ABERGAVENNY	*Aberystwith*	Deaths 149. Causes of increase: small pox, convulsions, pneumonia, and typhus fever.
PONTYPOOL	*Usk*	Deaths 27: the cause of so great an increase is the prevalence of English cholera, hooping cough, bronchitis, and debility.
WREXHAM	*Wrexham*	Deaths 94: there were 32 deaths registered from the age of 60 to 89 years. Fever caused 7 deaths. 9 were from measles, diarrhœa, and scarlatina, which were prevalent in the early period of the quarter; 17 cases were without medical attendant.
HOLYWELL	*Mold*	The number of deaths (78) is above the average of the corresponding quarters of former years. Fever prevails in some parts of the district, but it is of a mild type, and only one fatal case has occurred during the quarter. In 15 of the deaths, the ages of the deceased exceeded 75 years—the greatest age being 94.
———	*Flint*	Deaths 71: being 9 more than in the same quarter of last year. There were 22 cases of consumption. Typhus fever and small pox prevail to some extent.
ANGLESEY	*Llangefni*	Deaths 46: an increase of 8 as compared with the corresponding quarter of last year, arising principally from measles and consumption.
———	*Llandyfrydog*	Deaths 31: being above the average. Typhus has been prevalent.

REMARKS ON THE WEATHER DURING THE QUARTER ENDING JUNE 30th, 1847.

By James Glaisher, Esq., of the Royal Observatory, Greenwich.

THE cold Weather which prevailed during the whole of the preceding Quarter continued with slight exceptions, till the end of the first week in May. On the 9th of this month a period of warm weather set in, and from that day till June 7th, the daily mean temperature at Greenwich exceeded that of the average for the season by 5°6; and it was less than the average on every day from June 7th till the end of the Quarter.

The Weather during the period from May 9th to June 7th was very remarkable on account of its great heat, and particularly so on Sunday, May 23d, and on Friday, May 28th, (see foot note to the Weekly Report for the week ending May 29th). On these days the temperature at Greenwich rose higher than any on record, as occurring in the month of May, and from the numbers in the subjoined Table such appears to have been the case at all parts of the country situated south of the latitude of 54°, except at those places situated in the vicinity of the sea, where the highest readings of the thermometer were from 69° to 74°, whilst at all other places the readings were between 80° and 87° I believe there is no example on record of such high readings in the month of May.

The *mean temperature* of the Quarter at Greenwich was 53°2, which is 2°0 *below* that of the corresponding Quarter of 1846; 1°3 *above* that of 1845; 1°8 *below* that of 1844; and 0°2 *above* that of the Quarter for twenty-five years

The approximate mean monthly temperatures for other places are shown in the subjoined Table, and they differ but little in each month, from those of Greenwich, at all places south of Durham excepting those situated in the counties of Cornwall and Devonshire. The influence of height, however, is clearly indicated, in lowering the temperature, as at Beckington in Somersetshire, whose height above the level of the sea is estimated at 265 feet; and also that of the neighbourhood of the sea, as at Brighton, Liverpool and Whitehaven. The north latitude of the last place, however, may also have had some effect in the depression of the temperature.

The monthly mean temperatures of those places in Cornwall and Devonshire in April were *above;* in May nearly *the same* and in June were *below* those of other places.

This alleviation of the winter's cold, and lowering of the summer's heat in these counties, are easily accounted for. In winter when the air was colder than the water, it took a portion of heat from the surface of the water, which being cooled by being thus brought into contact with the cold air, sank and made room for the warmer portions beneath, whilst the heated air rose and flowed over the land. In summer when the air is warmer than the water, much heat becomes latent by the quick evaporation of the water. The water changed in vaponr, and mixed with the air as an elastic fluid, passes inland and takes a share in the total pressure of the atmosphere, and is of the utmost importance with reference to barometrical variations.

The *pressure of the atmosphere* at Greenwich was less than that in the corresponding Quarter of the three preceding years.

On first casting our eyes to the column of reduced barometer readings in the subjoined Table, we find but little difference between the numbers at each station. The numbers in May and June are greater than those in April, for all places, except Helston, notwithstanding the temperature of April was much below that of either May or June. In turning our attention to the numbers in the same column at the same places in the preceding Quarter, we still find the differences small between the numbers month by month from January to June, the numbers at the following month being sometimes larger and sometimes smaller than at the preceding month.

As the temperature increases, the air increases in volume, and consequently ascends, and flows off laterally above, over those places where the temperature is less and the air diminishing in volume. Hence the statical pressure of the column is diminished. On the other hand, as the temperature increases, the evaporation increases, and therefore the mass of water mixed with the air is augmented. Those two changes, occurring at the same time, but acting in opposite directions, have caused the annual variation of the volume of air to be completely masked in the barometer readings, including as they do the variations of vapour pressure. The readings of the barometer as contained in the subjoined Table, represent the height of the mercurial column caused by the joint pressure of the dry air, and the aqueous vapour mixed with it. One part of this column, therefore, is supported by the dry air, the other by the vapour; and it certainly is curious to see how very nearly the loss of weight of

one by the influence of heat, is balanced by the increased weight of the other, proceeding from the same cause, so that it is evident we cannot say whether an increase of heat will cause the sums of the pressures of dry air and vapour (commonly called the pressure of the atmosphere) to be augmented or diminished, or in other words, whether the preponderance of weight may be on the side of the water, or on that of the air. It is, therefore, evident that to render barometrical observations of value, a separation of the variation of the vapour-atmosphere becomes indispensable in any researches upon the variations (either diurnal or annual) of the atmospheric pressure, and this can be done only by cotemporaneous observations of the barometer, and the dry and wet-bulb thermometers, or instead of the two latter, of Daniells's hygrometer, and these instruments should all be of the best kind.

It is a matter of regret that there are so many omissions of simultaneous observations of these instruments in the subjoined Tables, and also that where such have been made, that so few of the instruments have been compared with standard instruments; these circumstances prevent me from speaking of the results other than in a general sense, or as approximations to truth.

From the numbers, in the following Table, under the head of "*Elastic Force of Vapour*," it will be seen that the tension of vapour in April was such as to balance more than a quarter of an inch of the mercurial column, and that in May and June, it was little short of four-tenths of an inch.

By turning our attention to the numbers in the next column, in connexion with those obtained in the preceding Quarter, the diminution of the volume of air consequent on the increase of temperature is clearly indicated.

The *Temperature of the Dew Point* at Greenwich was 44°, being lower than in the Spring of 1844, 5 or 6 by 3°1; 2°4; and 4°2 respectively.

The *Degree of Humidity* of the atmosphere at Greenwich was 0·765, being much less than that of the corresponding Quarters of the three preceding years. The sky was rather more clouded than in either of the three preceding years.

The *Horizontal Movement of the Air*, as deduced from observations, spread over the first five weeks and the last two weeks of the Quarter, was 849 miles weekly, being about the average amount.

The *Temperature of the Thames Water* was 56°2 by day, and 54°3 by night. The water was on an average 2°0 warmer than the air.

The *highest and lowest Readings of the Thermometer in Air* at the height of four feet above the ground, and protected as much as possible from radiation, were 85°3 and 24°3, as taken from two-hourly observations; those readings, therefore, are not the true maximum and minimum, unless such happened at one of the hours of observation.

The highest readings of the thermometer whose bulb was placed in the full rays of the sun, and protected from lateral wind striking it, was 114°8; the highest reading of a thermometer placed on grass was 150°+, and the lowest was 14°5; the lowest on Flax grass was 8°3.

In April the reading of the thermometer on grass was below 20° on four nights; between 20° and 30° on fifteen nights, and at 32° on two nights. In May it was at and below 32° on seven nights. In June it was below 32° on two nights; and between 32° and 40° on ten nights. *Vegetation* during the month of April was subjected to frequent low temperatures, and to this time was very backward. From May 9th the temperatures at night were seldom low, and the progress of vegetation was very rapid indeed, and at present the wheat and other grain crops generally promise to be abundant.

MONTHLY METEOROLOGICAL TABLE, FOR THE QUARTER ENDING JUNE 30.—(*continued.*)

	Year 1847 Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering — Highest during the month	Self-registering — Lowest during the month	Self-registering — Mean of the highest on each day	Self-registering — Mean of the lowest on each day	Self-registering — Approximate mean temp. of the month	Self-registering — Range of the Thermometer in the month	WIND — Average strength 0—6	WIND — General Direction	Amount of Clouds 0—10	RAIN — Number of days on which it fell	RAIN — Amount in inches	Deductions relative to the Humidity of the Atmosphere — Mean weight of Vapour in a cubic foot of Air	Deductions relative to the Humidity of the Atmosphere — Mean additional weight of Vapour required to saturate a cubic foot of Air	Deductions relative to the Humidity of the Atmosphere — Mean degree of Humidity	Deductions relative to the Humidity of the Atmosphere — Mean quantity of Water in a vertical column of Atmosphere	Deductions relative to the Humidity of the Atmosphere — Weight of a cubic foot of Air	REMARKS
		° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		in.	gr.	
LIVERPOOL OBSERVATORY	April	53·25	3·0 w.	29·743	0·256	29·487	48·7	44.1	39·0	....	57·1	30·2	50·6	41·3	46·0	26·9	1.5	N.W. by W.	7·3	14	1·8	2·9	1·2	0·717	3·5	538	The instruments are all read daily at 2h. Göttingen mean Astronomical time.
John Hartnup, Esq.	May	....	....	29·815	0·345	29·470	58·9	52·3	47·7	....	75·2	41·3	61·4	49·7	55·6	33 9	1·0	N.W.& S.W. by S.	6·4	19	2·4	3·9	1·8	0·684	4·8	528	
	June	....	....	29·914	0·385	29·529	61·9	55·4	50·9	....	72·7	47·5	64·0	54·1	59·1	25·2	1·2	N.W. by W.	6·2	15	2·5	4·2	1·9	0·690	5·3	526	Evaporation—2·18 inch
WHITEHAVEN	April	54·33	3·35 w.	29·596	0·255	29·341	46·7	43·3	39·0	....	54·0	29·0	48·9	38·1	43·5	25 0	2·4	W.	....	17	2·6	3·0	0·8	0·779	3·5	536	2·95
John Fletcher Miller, Esq.	May	....	....	29 679	0·349	29·318	56·5	52·1	48·9	48·6	71·5	39·0	59·8	47·3	53·6	32·5	1·8	S.W.	....	20	3·4	4·0	1·2	0·776	4·8	528	4·51
	June	....	....	29·780	0·387	29·391	60·8	55·3	51·2	51·2	79·0	40·5	65 0	50·4	57·7	38·5	1·6	N.W.& N.W.Var.	....	14	2·9	4·4	1·6	0·728	5·4	527	Observations at 10h. A.M., and 3 P.M.
DURHAM,	April	54·16	1·34 w.	29·349	0·229	29·120	42·3	39·5	35·9	....	54·0	27·8	48·0	35·0	41·5	26·2	2·3	.....	5·7	9	0·4	2·6	0·6	0·809	3·2	533	Height of station unknown
Rev. R. A. Thompson.	May	....	....	29·474	0·335	29·139	51·1	48·7	46·8	....	75·0	33·6	59·3	43·8	51·5	41·4	1·8	.....	6·3	17	4·2	3·9	0·6	0·848	4·6	529	Daily observations at 9 A.M. and 9h. P.M.
	June	....	....	29·544	0·367	29·177	55·3	52·3	49·5	....	73·0	40·8	63·1	48·3	55·7	32·2	1·8	.....	5·8	11	0·6	4·2	0·8	0·843	5·1	526	
NEWCASTLE-UPON-TYNE,	April	54 58	1·37 w.	29·603	0·282	29·321	43.1	42·6	41·9	....	57·5	30·0	....	....	....	27·5	....	S.W.&S..E.	....	11	0·7	3·3	0·1	0·961	3·9	541	Observations 3 times a day reduced on the supposition that the times were 9 A.M. 3 P.M. 9 P.M.
G. Muras, Esq.	May	....	....	29·704	0·375	29·329	51·2	50·6	50·1	...	74·5	35·0	....	....	....	39·5	....	S.W.bys.E.&N.E.	....	15	3·8	4·3	0 1	0·956	5·1	533	
	June	....	....	29·778	0·402	29·376	56·1	54·2	52·2	....	73·5	41·0	....	....	....	32·5	....	SW. & N.E.	....	14	0·8	4·6	0·6	0·890	5·6	529	The height of the station unknown.
NORTH SHIELDS	April	55·0	1·25 w.	29·716	....	....	....	....	....	....	56·0	31·5	49·5	38·3	41·9	25·5	....	W.S.W.	....	19	....	....	....	....	....	....	Times of observation not stated.
S. J. Tibbs, Esq.	May	....	....	29·828	....	....	52·0	....	....	....	72 0	36·5	57·4	45·7	51·5	35·5	....	E. & W.	....	21	....	....	....	....	....	....	
	June	....	....	29·906	0·386	29·521	57·6	54·0	49·9	....	71·0	43·0	61·6	51·3	56·4	28·0	....	N.S. & W.	....	18	3·0	4·5	0 8	0·816	5·3	531	

The barometer and thermometers at Helston were made by Mr. Moyle himself, and with great care.

The barometers at Greenwich, Walworth, Cambridge, and Liverpool, have been compared either directly or indirectly with the Royal Society's standard. The thermometers at Greenwich and Lewisham have been compared with standards. The dry and wet bulb thermometers used at Whitehaven after May 9 were made by Barrow, and compared with the Greenwich and Lewisham instruments by Mr. Glaisher, and no other instrument has been compared with standards.

The heading of each column of the preceding table sufficiently explains itself, except that of the degree of humidity. This is expressed in the natural scale in which air at its greatest humidity (that is, when it is saturated with vapour,) is considered as unity; and air absolutely deprived of all moisture is considered as Zero, the intermediate degrees being proportional. Therefore, that which constitutes the measure of the degree of humidity of the air, is the proportion of moisture *it does* contain to what *it would* contain if saturated: thus, if air at any temperature whatever, contains vapour of half the tension which it would do if saturated, the degree is 0·5; if three-fourths, it is 0·75, and so on.

The reduction of the preceding results has been made as follows:—The first process was the application of corrections, calculated from the Greenwich observations of the years 1840 to 1844 to reduce the monthly results at the hours of observation, to mean monthly results, for the barometer, thermometer, and each hygrometrical result. The next process was the taking the reduced monthly mean "elastic force of vapour" from the reduced "barometer readings." The third step was the taking the quarterly mean of these monthly values, reducing that for the barometer to the level of the sea, and in this way the following Quarterly Table was formed.

QUARTERLY METEOROLOGICAL TABLE.

NAMES OF THE PLACES	Mean pressure of the Atmosphere of Dry Air reduced to the level of the Sea	Mean temperature of the Air	Highest reading of the Thermometer	Lowest reading of the Thermometer	Range of the Thermometer	WIND		Mean amount of Cloud 0—10	RAIN		Mean weight of Vapour in a cubic foot of Air	Mean additional weight required to saturate a cubic foot of Air	Mean degree of humidity	Mean whole amount of Water in a vertical column of Atmosphere
						Mean estimated strength 0—6	General Direction		Number of days on which it fell	Amount collected				
	in.	°	°	°	°	°		°		in.	gr.	gr.		in.
Helston	29·551	51·3	74·0	29·0	45·0	1·3	S.W.	5·6	30	7·2	4·0	0·5	0·865	4·9
Falmouth	.....	50·4	69·0	32·0	37·0	2·0	Variable	7·1	41	9·4	....	....	....	....
Truro	.....	50·5	69·0	34·0	35·0	1·1	S.W. & N.W.	6·0	47	10·6	....	....	....	....
Woodfield, Devon	29·642	52·7	75·0	31·0	44·0	2·2	SW. & N.E.	....	39	5·1	3·7	0·7	0·767	4·5
Exeter	.....	51·5	77·0	30·0	47·0	....	N. & W.	....	28	6·1	....	....	....	....
Brighton, Black Rock	29·650	50·4	76·0	28·0	48 0	....	S.W. & N.E.	5·1	30	....	3·7	0·7	....	4·4
Chichester	29·509	50·8	77·0	30 0	47·0	....	Variable	....	....	4·0	....	....	....	4·6
Uckfield	(29·707)	52·4	87·0	23·0	64·0	....	S.W. & W.	....	31	4·1	3·9	0·6	0 745	4·7
Saffron Walden	.....	51·2	85·0	20 0	65·0	3·1	N.W. & N.E.	5·3	56	4·4	....	....	....	....
Beckington, Somerset	29·650	51·5	84·0	19·0	65·0	2·3	S.W.	5·0	43	5·6	3·8	0·5	0·846	4·6
Royal Observatory Greenwich	29·602	53·2	85·3	24·3	61·0	....	S.W.	6·5	....	4·5	3·7	0·7	0·765	4·4
Lewisham	.....	52 1	87·0	24·0	63·0	....	S.W.	7·0	....	....	3·6	0·6	0.742	4·3
Walworth, Surrey	.....	52·0	84·0	27·0	57 0	1·4	S.W.	5·3	41	3·5	3·7	0·6	0·780	4·5
Pool Cottage, Hereford	.....	50·2	....	....	....	1·6	Variable	(1·6)	36	7·4	....	....	....	....
Cardington near Bedford	.....	51·0	78·0	28·0	50·0	.....	.....	....	38	6·1	....	....	....	....
Cambridge Observatory	29·672	52·3	79 9	25·8	54·1	0·2	Variable	6·0	46	5·6	3·8	0·8	0·825	4·6
Empingham	.....	51·1	....	....	....	.....	S.W. & N.W.	....	59	6·3	....	....	....	....
Derby	.....	49·8	81·0	24·0	57·0	.....	Variable	.....	45	9·2	3·5	0·8	0·774	4·2
Highfield House	.....	53·1	84·5	28·0	56·5	2·8	W.	5·3	55	8·3	4·1	0·6	0·697	5·0
Liverpool Observatory	29·575	51·9	75·2	30·2	45·0	1·2	S.W. & N.W.	6·6	48	6·7	3·3	1·2	0·836	4·1
Whitehaven	.....	49·9	79·0	29·0	50·0	1·9	S.W. & N.W.	.....	41	8·9	3·6	0·7	0·894	4·3
Durham	29·572	47·9	75·0	27·8	47·2	1·9	.....	5·9	37	5·2	3·6	0·4	0 836	4·3
Newcastle	.....	47·6	74·5	30·0	44·5	.....	S.W. & S.E.	.....	40	5·3	3·9	0·3	.....	....
North Shields	.....	48·2	72·0	31·5	40·5	.....	Variable	.....	58	.....	.....	.....	.....	....
No. of Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14

From the numbers in the first column it appears that the volume of air at those places situated near the western coast, was less than it was in the interior of the country. At Brighton the reverse appears to have been the case, but, I do not know whether any other correction has been applied to the readings of this instrument than that for the expansion of the mercury in the tube; and none of the instruments used near the coast have been compared with standards, so that from the preceding results, I can only infer that such seems to be the case. The mean of all the results in the first column, except that of Uckfield is 29·603 inches, and this may be considered as the pressure of dry air for England, during the quarter ending June 30, 1847.

From the numbers in the second column, we find for the quarter ending June 30, 1847, that the mean temperature of the counties of Cornwall and Devonshire was 51°3, and for the remaining counties, excepting those N. of latitude 54°, was 51°4, and that the mean temperature of Durham, Newcastle, and North Shields was 47°9.

The range of the temperature has been different in different places, according to their latitude and locality. At all places situated near the sea it has been very much smaller than at those places having the same, or even more northern latitude, but situated inland. The average quarterly range in Cornwall and Devonshire was 41°6, but at two of the stations it was 4o and 6° respectively, smaller than this amount. At all places in England, south of latitude 52°, excepting those in the vicinity of the sea, the range was the greatest, being 62°5; and it was within this space the highest and lowest readings in the quarter occurred, being 87° and 19° respectively. The extreme range of temperature in England during the quarter was therefore 68°. The average range of those places situated between the latitude 52° and 55° was about 56°. Between 53° and 54° there was no station, and at about 55° it seems to have been about 43° only.

As far as we can infer from the numbers in the sixth column, it would seem that the velocity of the wind has been nearly uniform throughout the country, (the number at Cambridge is evidently erroneous); and from the seventh column we find that the mean direction has been S.W. From the numbers in the eighth column the distribution of cloud has been nearly the same at all parts of the country, and such as to cover less than three-fifths of the whole sky.

The fall of rain has been the largest in the counties of Cornwall and Devon, yet the amounts collected at Hereford, Derby, Nottingham, and Whitehaven have been nearly as large. At nearly all the other places the amount is about one-half of that of those places. Near the southern coast the fall has been the smallest in amount.

The weight of vapour in a certain mass of air, was the greatest near the sea coast, and the additional quantity required to saturate the same mass of air was the smallest at those places; also the degree of humidity was the greatest, and the water held in solution was consequently the largest. At places inland the reverse of the above results, is generally shown, and where it is not, it arises from the dry and wet bulb thermometers not being good, or improperly placed, and such appears to be particularly the case at Beckington, Cambridge, Highfield House, Newcastle and North Shields.

The average weight of a cubic foot of air was about 533 grains.

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING JUNE 30.

Compiled from Observations furnished by the Gentlemen whose names are mentioned in the first column, the Hygrometrical results having been deduced from Glaisher's Hygrometrical Tables.

	Year 1847 / Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	Deductions relative to the Humidity of the Atmosphere: Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	REMARKS
		° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		in.	gr.	
HELSTON,	April	50·7	5·18 w.	29·745	0·283	29·462	48·1	45·2	42·0	....	60·0	29·0	51·7	40·4	46·0	31·0	1·4	S.W. & N.W.	8·0	14	2.8	3·3	0.8	0·811	3·9	538	Daily observations at 9h.
M. P. Moyle, Esq.	May	....	....	29·733	0·390	29·343	56·2	53·3	51·3	....	68·0	39·0	59·9	49·3	54·6	29·0	1·4	S. & S W.	4·7	8	2 8	4·4	1·8	0·848	5·4	529	A.M., 3h. P.M. and 9h. P.M.
	June	....	....	29·851	0·421	29·430	60·2	56·5	53 5	....	74.0	45·0	65·6	52·2	58·9	29·0	1·1	S.W.	4·2	8	1·6	4·7	1·2	0·797	5·8	527	
FALMOUTH,	April	50·8	5·2 w.	29·79	....	....	46·5	....	....	....	56·0	32 0	50·8	41·4	46·1	24·0	2·0	W. & W.N.W.	7·3	19	3·1	....	....	....	....	....	Daily observations at 9h.
Lovell Squire, Esq.	May	....	....	29·82	....	....	53 5	....	....	....	66·0	40·0	58 4	48·1	53·2	26·0	2·0	S.E. & S.W.	7·5	15	4·1	....	....	....	....	....	A.M., 3h. P.M. and 9h. P.M.
	June	....	....	29·94	....	....	57·4	....	....	....	69·0	47·0	62·4	51·3	56·9	22·0	2·0	E.N.E. & W.	6·7	10	2·2	....	....	....	....	....	
TRURO,	April	50·17	5·4 w.	29·914	....	....	....	....	....	....	55 0	34·0	50·4	41·9	46·1	21·0	1·2	S.W. & N.W.	6·9	21	3·4	....	....	....	....	....	Daily observations at 9h.
Dr. C. Barham.	May	....	....	30·117	....	....	....	....	....	....	67·0	40·0	58·3	48 1	53·2	27·0	1·0	S.W. & S.E.	5·8	15	5·1	....	....	....	....	....	A.M., 3h. P.M., and 9h. P.M.
	June	....	....	30·055	....	....	....	....	....	....	69·0	47·0	62·6	52·3	57·4	22·0	1·0	N.W. & S.W.	5·5	11	2·1	....	....	....	....	....	
WOODFIELD, near TORQUAY, DEVON,	April	„	„	29·77	0·268	29·502	48·3	....	40·1	....	61·0	31.0	53·4	42·3	47·7	30·0	2·2	N.E.	....	18	1·7	3 1	0·9	0·774	3 7	537	Evaporation— sun 4·7 in. | shade .. 2·7 in. " 4·8 " | .. 3·3 " " 6·5 "
E. Vivian, Esq.	May	....	....	29·79	0·355	29·435	56·1	....	48·6	....	71·0	39·0	62·0	49·2	55·6	32·0	1·8	S.W.	....	13	2·2	4·1	1·0	0·796	4·9	528	
	June	....	....	29·92	0·379	29·541	60·8	....	50·1	....	75·0	46 0	67·1	52·5	59·8	29·0	2·5	S.W.	....	13	1·2	4 3	1·7	0·710	5·3	527	Observations at 9h. A.M.
EXETER,	April	50·44	3·33 w.	29·61	....	....	47 3	....	....	40·9	59·0	30·0	53·4	39·3	46·4	29·0	....	W. & N.	....	10	2·1	....	....	....	....	....	Daily observations at 9h.
Dr. Shapter	May	....	....	29·37	....	....	56 6	....	....	46·9	71·0	36·0	62·6	45·8	54·2	35·0	....	S.	....	10	2 8	....	....	....	....	....	A.M.
	June	....	....	29·79	....	....	60·7	....	....	49·2	77·0	44·0	67·0	50·7	58·9	33·0	....	N. & W.	....	8	1·2	....	....	....	....	....	
BRIGHTON, BLACK ROCK,	April	50·50	0·9 w.	29 799	0·229	29·570	45·0	41·1	35·9	....	59·0	28 0	49 5	37·6	43·6	31·0	....	N.E. & S.W.	5·5	9	....	2·7	0 9	0·742	3·2	539	Daily observations at 9h.
J. O. N. Rutter, Esq.	May	....	....	29 919	0·330	29·589	56·9	51·4	46 1	....	76 0	38·0	61·0	48 0	54·5	38·0	....	S.E., S.W. & N.W.	4·8	10	....	3·9	1·4	0·725	4·6	530	A.M., 3h. P.M. and 9h. P.M.
	June	....	....	29·963	0·419	29.544	60 0	56·3	53·0	....	74·0	40·0	66·2	50·0	58·1	34·0	....	S.W. & N.E.	5·0	11	....	4·7	1·1	0·810	5·8	528	
CHICHESTER,	April	50·50	0·46 w.	29 811	0·262	29 549	....	....	....	39 7	60·0	30·0	54·2	37·5	45·8	30 0	....	N.W. & S.W.	....	....	1·0	....	....	....	3·6	....	Daily observations at 9h.
Wm Hills, Esq., Curator of Philosophical Institution.	May	....	....	29·932	0 363	29·569	....	....	....	49·2	77·0	35·0	63·5	45·7	54·6	42·0	....	S.E., S. & S.W.	....	....	1·5	....	....	....	5·0	....	A.M. and 9h. P.M.
	June	....	....	29·993	0·388	29·605	....	....	....	51·1	76·0	41·0	65 6	48·6	57·1	35·0	....	N.E. & S.	....	....	1·5	....	....	....	5·1	....	The height of the station above the sea unknown.
UCKFIELD,	April	50 59	0·5 E.	29·746	0·237	29·509	46·9	42 5	37·2	37·7	66·0	23 0	57·9	34·9	46·4	43·0	....	N.W.	....	8	0·7	2·8	1·1	0·720	3·3	539	Daily observations at 9h.
C. L. Prince, Esq., Surgeon.	May	....	....	29 845	0·376	29·469	59·7	54·5	50·3	50·9	87 0	29·0	69·4	44 6	57·0	58·0	....	S.W.	....	12	1·6	4·4	1·5	0·744	5·1	528	A.M. and 9h. P.M.
	June	....	....	29·901	0·408	29·493	61·0	56·3	52 7	53 1	82·0	35·0	70·3	47·3	58·8	47·0	....	S.W.	....	11	1·8	4·6	1·4	0·770	5·6	527	
AFFRON WALDEN,	April	52 2	0·15 E.	29·69	....	....	....	....	....	....	64 0	20·0	55·0	33·0	44·0	44·0	2·8	N.W.	6·0	19	1·1	....	....	....	....	....	Daily observations at 9h.
T Spurgin, Esq.	May	....	....	29·79	....	....	63·6	61·4	....	....	85·0	35·0	66·3	47·2	56·7	50·0	3·0	N.W.	4·4	20	1·8	....	....	....	....	....	A.M. and 9h. P.M.
	June	....	....	29 57	....	....	64·2	62·1	....	....	78 0	39·0	66·4	49 4	57·9	39·0	3·4	N.E.	5·6	17	1·5	....	....	....	....	....	In April snow fell on 5 days.
BE KINGTON,	April	51·24	2 22 w.	29·58	0·256	29·324	46·0	43·0	39·1	....	65·0	19·0	53.0	51·5	42·3	46·0	2·4	S.W.	5·0	19	1·9	3·0	0·7	0 803	3·5	537	Daily observations at 9h.
Rev. C. Blathwayt, A.M.	May	....	....	29·70	0·385	29·315	57·0	53·4	50·9	....	84·0	26·0	67·0	38·0	52·5	58·0	2·4	S.W. & W.	5·0	13	1·7	4·4	0·8	0·844	5·3	527	A.M., 3h. P.M., and 9h. P.M.
	June	....	....	29·79	0·380	29·410	59·0	54 0	50·5	....	80·0	31·0	69·0	41·0	54·9	49·0	2·2	S.S.W.	5·0	11	2·0	4·3	1·4	0·752	5·3	526	

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING JUNE 30, (*continued.*)

Year 1847 / Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	Deductions relative to the Humidity of the Atmosphere: Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	REMARKS
	° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		gr.	gr.	
GREENWICH OBSERVATORY.	April	51·31	0·0	29·653	0·235	29·418	45·3	41·5	36·7	....	61·0	24·3	....	....	45 3	36·7	....	S.W. & N.E.	6·8	....	1·0	2·8	0·9	0·748	3·3	538	Daily observations at every even 2h. Göttingen mean Astronomical time.
The Astronomer Royal.	May	....	....	29·761	0·350	29 414	56·4	52·1	48·2	....	85·3	37·0	....	....	56·4	48·3	....	S.W.	6·0	....	1·9	4·1	1·2	0·781	4·8	530	
	June	....	....	29·805	0·366	29·439	58·0	53·4	49·4	....	79·2	43·0	....	....	58·0	36·2	....	S.S.W.	6·8	....	1·6	4·2	1·3	0·765	5·1	527	
LEWISHAM,	April	51·31	....	....	0·232	....	46·9	42·1	36·2	....	62·8	24·0	54·8	36·0	15·3	38.8	....	S.W. & N.E.	7·0	....	....	2·8	1·1	0·706	3·1	....	Daily observations at 4h., 8h., and 20h. Göttingen mean Astronomical time.
James Glaisher, Esq.	May	....	....	....	0·366	....	59 9	53·8	49·5	....	87·0	35·1	69·1	45·7	57·4	53·1	....	S.W.	7·0	....	....	4·4	1·5	0·743	5·1	....	
	June	....	....	....	0 345	....	60·5	53·3	47·7	....	81·5	38·0	69·1	48·6	58·8	43·5	....	S.S.W.	7·0	....	....	4·0	2·0	0·660	4·8	....	
WALWORTH,	April	51·31	0·6 W.	29 605	0·262	29·343	46·3	43·3	39·7	....	60·0	27·0	52·5	37·3	44·9	33·0	1·7	E. & W	6·5	13	1·1	3·0	0·7	0·703	3 6	536	Daily observations at 9h. A.M., 3h. P.M., and 9h. P.M.
W. H. White, Esq.	May	....	....	29·714	0 355	29 359	56·8	52·1	18 5	....	84·0	35·0	65·8	49·6	57·7	·9 0	1·2	S.W.	5·3	16	1·6	4·0	1·3	0·749	1·9	526	The height of station above the sea unknown.
	June	....	....	29 863	0·393	29·470	59·9	55·2	51·5	....	78·0	43·0	67·2	49·9	58·5	35·0	1·3	S.W.	4·0	12	0 8	4·4	1·5	0 751	5·4	526	
AYLESBURY,	April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	
Thomas Dell, Esq.	May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	Daily observations at 9h. A.M.
	June	51·49	0·43 W.	29·669	0·397	29 272	61·0	55·2	51·4	....	80·0	38·0	70·0	48·2	59·1	42·0	0·6	S.W.	6·4	13	....	4·4	1·7	0·728	5·5	523	
POOL COTTAGE, HEREFORD	April	52·4	2·34	29·28	....	....	49·0	....	....	....	....	....	....	....	....	....	1·9	N.W. & S.W.	....	12	1·3	....	....	....	....	....	Evaporation in. 2·8 4·3 4·4 } Observations at noon.
J. Pendergrass, Esq.	May	....	....	29·36	....	....	60 0	....	....	....	....	....	....	....	....	....	1·2	S. & S.W.	....	12	3·4	....	....	....	....	....	
	June	....	....	29 51	....	....	62·2	....	....	....	....	....	....	....	....	....	1 8	N.E., N.W. & S.W.	....	12	2·7	....	....	....	....	....	
CAMBRIDGE OBSERVATORY.	April	52·13	0·6 E.	29 785	0·228	29·557	48·3	42·6	35·8	....	65 6	25·8	55·7	35·6	45·7	38·8	2·0	N.	5	13	0·9	2·8	1·2	0·710	3·2	539	Daily observations at 9h. A.M. and 3h. P.M.
John H. Morgan, Esq.	May	....	....	29 931	0·389	29·512	61·0	55·5	51 2	....	79·9	34·7	68·9	46·7	57·8	45·2	2·0	S.W.	5	18	2·2	4·4	1·6	0·730	5·4	527	
	June	....	....	29·990	0·434	29·556	61·1	57·3	54·4	....	76·2	42·3	67·5	49·3	58·4	33·9	2·0	S.S W.	7	15	2·5	4·8	1·1	0·806	6·0	527	
CARDINGTON, near BEDFORD,	April	52·7	0·25 W.	....	....	....	....	....	....	....	60·0	28·0	52·0	36·0	44·0	32·0	....	.....	....	10	1·0	....	....	....	....	....	
Mr. Maclaren, Gardener to S. C. Whitbread, Esq.	May	....	....	....	....	....	....	....	....	....	78·0	33·0	65·0	47·0	56·0	45·0	....	.....	....	15	3·0	....	....	....	....	....	
	June	....	....	....	....	....	....	....	....	....	75 0	43·0	66·0	0·0	58·0	32·0	....	.....	....	13	2·1	....	....	....	....	....	
EMPINGHAM,	April	52·41	0·43 W.	....	....	....	50·0	....	....	....	....	....	....	....	....	....	....	N.W.	....	21	0·7	....	....	....	....	....	Daily observations at 2h. P.M.
Wm. Fancourt, Esq.	May	....	....	....	....	....	62·6	....	....	....	....	....	....	....	....	....	....	S.W.	....	21	4·4	....	....	....	....	....	
	June	....	....	....	....	....	65·0	....	....	....	....	....	....	....	....	....	....	S.W.	....	17	1·5	....	....	....	....	....	
DERBY,	April	52·55	1·28 W.	29 54	0·241	29·299	50·3	44 1	37·5	....	61·0	24·0	52·3	35·0	43·7	37·0	....	Variable	....	18	1·8	2·8	1·4	0·651	3·3	522	Daily observations at 3h. P.M.
Mr. J. Davis, Optician.	May	....	....	29 63	0·352	29·278	62·0	54·2	48 3	....	81·0	32·0	63·7	44·3	54·0	49·0	....	,,	....	19	4·9	4·0	2·2	0·639	4·9	520	The height of station above the sea unknown.
	June	....	....	29·76	0·410	29·350	64 0	57·4	53·0	....	76·0	40 0	65·6	48·2	56·9	36·0	....	,,	....	18	2·5	4·5	2·1	0·676	5·7	520	
HIGHFIELD HOUSE, NOTTS,	April	52·58	1·10 W.	29·667	0·271	29·396	47 0	44·0	40·7	41·2	62·5	28·0	52 5	37·0	45·1	34·5	3·4	W.	4·9	18	1·3	3·1	0·8	0·801	3·8	536	Daily observations at every 3h., except at 3h. A.M.
Edward Joseph Lowe, Esq.	May	....	....	29 771	0·383	29·388	60·8	4 9	50 8	51·0	84·5	35·0	67·8	48·0	57·9	49·5	2·9	W. & S.	5·0	20	5·0	4·3	1·8	0·710	5·3	524	The reading of the Barometer for June is evidently in error.
	June	....	....	(29·552)	0·435	(29·117)	62·8	57·6	54·5	51·4	82·5	44·1	70·6	52·2	61·4	38·4	2·0	W.	6·0	17	2·0	4·9	1·6	0·753	6·0	518	

QUARTERLY METEOROLOGICAL TABLE,

Compiled from the Weekly Tables furnished to the Registrar General by the Astronomer Royal.

Deaths registered in London from Small Pox, Measles, Scarlatina, Hooping Cough, Typhus, Diarrhœa, Dysentery and Cholera, Influenza, Consumption, and other diseases of the Lungs; the numbers at each age,† and the total deaths ‡ (except violent and sudden) in each of the 13 weeks ending June 26, 1847.

1847 Week ending	Phases of the Moon	Mean height of the Barometer, from 72 observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS: Highest during the week	Lowest during the week	Mean: Of the Highest on each day, from 6 observations	Mean: Of the Lowest on each day, from 6 observations	Mean: Difference in degrees	Mean of 72 observations weekly	Dew Point: Mean of 72 results	Self-Registering: Highest in the sun: During the week	Highest in the sun: Mean of 7 observations	Self-Registering: Lowest on the grass: During the week	Lowest on the grass: Mean of 7 observations	In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'Clock. MEAN. Of the highest on each day from 7 observations.	Of the lowest on each day from 7 observations.	Difference between the dew point temperature and air temperature: Mean of 72 differences	Mean of the greatest on each day, 6 observations	Mean of the least on each day, 6 observations	Difference between the mean temperature of the week, and the mean temperature of the same week on an average of 25 years	WIND: Pressure in lbs. on the square foot: General direction	Greatest pressure in the week	Mean for the week	The amount of Horizontal movement of the air in each week	Mean amount of Cloud, 0-10	Rain in inches (7 days)	Small Pox	Measles	Scarlatina	Hooping Cough	Typhus	Diarrhœa, Dysentery, and Cholera	Influenza	Phthisis or Consumption	Other diseases of the lungs	‡ Deaths at Three Ages, (exclusive of violent and sudden Deaths): 0 to 15	15 to 60	60 and upwards	Deaths from all causes, (exclusive of violent and sudden deaths)
		inches	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o				miles														
April 3rd	Full, Mar. 31st	29.401	44.4	28.0	43.1	31.2	11.9	36.8	30.7	67.0	58.5	16.8	22.3	45.5	43.1	6.1	12.7	1.8	—7.0	Variable	4.5	0.2	570	7.4	0.55	8	5	7	38	18	19	4	115	187	385	326	230	912
,, 10th	Last qr., Ap. 8th	29.618	57.6	39.4	54.1	42.5	11.6	47.9	39.0	73.0	64.9	29.0	32.8	41.9	44.5	8.2	16.5	2.2	+2.1	W. & W.S.W.	15.0	1.1	1345	6.9	0.13	16	12	16	46	43	12	4	138	206	420	349	244	1013
,, 17th	New, ,, 15th	29.744	61.0	24.3	50.8	35.4	15.4	42.6	35.0	82.0	67.8	14.5	27.3	46.8	45.9	7.5	14.8	2.0	—3.6	N. & N.N.E.	5.3	0.3	650	7.9	0.32	12	6	12	32	29	20	4	151	171	360	343	250	954
,, 24th	1st qr., ,, 22nd	29.816	58.0	31.8	55.7	35.7	20.0	45.5	36.7	87.0	79.8	19.0	24.1	47.5	47.0	8.8	16.6	2.1	—2.1	N. & E.	2.0	0.0	160	4.8	0.00	12	7	11	31	41	24	2	141	193	365	355	242	952
May 1st	Full, ,, 30th	29.569	59.5	37.0	56.4	42.0	14.4	48.1	40.6	80.0	74.1	26.0	33.8	50.4	49.5	7.5	16.5	1.6	—1.2	S.W.	10.0	1.1	785	7.7	0.54	14	10	13	36	40	19	3	132	172	369	359	234	962
,, 8th	Last qr., May 7th	29.584	62.5	37.7	55.6	42.9	12.7	49.1	43.4	80.0	72.6	28.0	34.4	51.3	50.9	5.7	11.2	0.6	—4.2	S.	8.0	0.2	—	6.2	0.54	12	13	11	32	34	16	—	110	195	413	328	226	967
,, 15th	New, ,, 14th	29.665	68.0	45.1	63.8	48.3	15.5	56.1	49.5	97.3	84.2	32.0	39.6	56.2	54.9	6.6	13.1	0.8	+4.6	S.S.W.	3.5	0.2	—	6.8	0.54	13	18	15	30	52	13	—	137	175	379	336	224	941
,, 22nd	1st qr. ,, 22nd	29.836	73.3	48.5	67.2	50.0	17.2	58.4	49.9	99.0	86.1	35.7	40.5	59.4	58.3	8.5	15.5	2.8	+3.9	S.W.	4.6	0.4	—	6.2	0.14	11	33	26	35	51	16	1	116	121	400	272	201	873
,, 29th	,,	29.894	85.3	43.5	74.8	50.3	24.5	63.4	52.3	111.0	99.0	29.2	39.9	65.4	62.4	9.9	20.0	1.7	+8.9	S.S.W.	4.0	0.2	—	3.5	0.21	14	30	20	33	52	19	1	133	136	412	314	192	918
June 5th	,,	30.223	79.2	49.0	76.6	50.7	25.9	62.3	50.8	114.8	100.2	33.5	36.7	70.0	65.4	11.6	22.5	2.6	+5.1	N.N.E.	3.3	0.1	—	3.5	0.00	14	34	4	22	51	15	1	109	93	323	295	142	752
,, 12th	,,	29.769	67.0	43.0	63.1	45.7	17.4	54.4	44.7	89.0	82.5	26.0	35.9	66.1	62.3	9.7	18.9	2.1	—4.2	N.W.	4.5	0.2	—	6.7	0.43	12	32	13	17	44	23	—	154	108	341	290	178	811
,, 19th	,,	29.535	66.6	47.4	61.4	50.3	11.1	56.0	50.5	86.5	77.2	38.9	41.5	63.6	60.5	5.5	11.2	0.9	—1.3	S.S.W.	8.0	0.4	1160	8.2	0.94	29	35	19	27	52	26	3	134	117	396	336	181	903
,, 26th	,,	29.620	69.8	46.0	65.3	50.5	14.8	57.8	50.7	92.0	82.0	31.5	43.1	63.9	60.4	7.1	14.4	1.2	—2.7	S.S.W.	3.5	0.3	1270	7.9	0.25	26	42	11	18	58	23	1	134	119	391	309	175	883
Mean, Highest, or Lowest, of the 13 weeks.		29.713	65.3	24.3	60.6	44.3	16.3	52.2	44.1	111.8	79.2	14.5	34.9	56.2	54.3	8.0	15.7	1.7	—0.4		15.0	0.4	*849	6.6	4.59	181	277	174	392	568	245	21	1733	1993	4904	4204	2712	11841

* Mean of 7 weeks.

† The ages of 14 were not specified in the Returns.

‡ Deaths enumerated under the heads "violent" and "sudden," chiefly consist of cases returned by the Coroner, many of which are registered, not when they occur, but at uncertain periods; and they are therefore excluded from this comparison of weeks.

INSTRUCTIONS FOR MAKING AND REGISTERING METEOROLOGICAL OBSERVATIONS, REQUIRED TO FORM THE QUARTERLY REPORT FURNISHED TO THE REGISTRAR-GENERAL.

Drawn up by JAMES GLAISHER, ESQ., *of the Royal Observatory, Greenwich.*

WITH a view to the better determining of the laws of the changes in the atmosphere, it is necessary that observers should understand the use of the Instruments in their possession; and, as one of the most important ends of Meteorological Observations is their comparison with each other, it is desirable that they should *observe as much alike* as possible, taking the precautions necessary in the use of each instrument, so that the difference between the final results, after all have been equally reduced, shall be due to locality alone.

Those persons who kindly furnish a Quarterly Meteorological Report to the Registrar-General, are earnestly requested to attend to the following Instructions, as it is the intention of the Registrar-General, on the receipt of the reports, to have the individual results discussed and examined as to their accuracy, and those only, which are found to have been taken with good instruments properly placed and their readings corrected, will be converted into mean values, and used in deducing the final results.

Of Meteorological Instruments.

The Barometer should be examined, before fixing it in its place, for air-bubbles in the tube, and for the purpose of ascertaining that the space above the mercury is nearly free from air. This is done by inclining the instrument from the horizontal position, when air-bubbles, if any, will be seen to move to and fro. These must be driven into the cistern, by inverting the Instrument, and gently tapping it by the hand. To ascertain if much air exists above the mercury, the barometer should be inclined from the vertical position, till the mercury taps against the upper end of the tube; this tap will be heard distinctly, if the space be free from air; but if the tap be dull, or not heard at all, the amount of air must be considerable, and must be driven into the cistern by inversion as before. If the air bubbles and confined air cannot thus be expelled, the instrument is useless.

In fixing the instrument, choose a position which commands a good light, and which is not exposed to sunshine. The tube must be adjusted to a vertical position by a plumb-line, and then fixed firmly, so as never to shift from this position. In reading, bring the index always to the summit of the convexity of the mercury, so that it may form a tangent to it. Before reading, give a few taps on the instrument, as the mercury is apt to adhere to the glass, and give erroneous readings. The tapping should never be omitted. The eye must be placed, at the time of reading, on the exact level of the top of the mercurial column, so that the eye, the index, and the top of the column, may be all in the same horizontal plane.

To render barometric observations comparable with each other, it is necessary that the corrections due to each instrument should be ascertained. The first of these may be called the Zero correction—to determine which, the barometer must be compared with a standard instrument, or some other which has been compared with it. In making such comparisons, all that is necessary is to record the readings of the two instruments, as they are placed side by side, for a few days. The amount of this correction is frequently very large, amounting to one or two tenths of an inch: as it is the intention to reduce all readings to the level of the sea, it is very desirable that this correction should be ascertained. The second correction is that due to the different capacities of the cistern and tube, and arises from a change of level in the mercurial surface of the former, owing to a portion of its contents being transferred to the tube, or *vice versâ*—the effect of which is always to make the apparent changes less than the real.

The third correction, and the most important of all, is that due to the temperature of the mercury in the barometer at the time of observation. To ascertain this a thermometer is placed, usually with its bulb plunged within the mercury of the cistern. In practice, the reading of the thermometer should be first taken, particularly if it should be so placed, that its readings may be influenced by being breathed upon, or affected by a person standing near to it.

The correction due to the depression of the mercury in glass tubes forms another correction. This may, however, be generally included in the Zero correction.*

These several corrections need not be applied to individual results, but to their monthly means.

N.B. No observations taken by means of a wheel-barometer are of any value, and such need not be returned.

Dry and Wet-Bulb Thermometers.

It is particularly requested that the report should contain *simultaneous* observations of these instruments, and that the instructions necessary to be attended to in their use, as explained in Glaisher's Hygrometical Tables, be strictly followed; we may add, however, that it will be found convenient to place the cotton-lamp wick in water at least one day before it is intended to be used.

Of the Maximum and Minimum, or Self-registering Thermometers.

These should be placed a little inclined from the horizontal position, at the height of about four feet above the ground—the maximum with its bulb a little raised, and the minimum with its bulb a little depressed. They should be so placed as to be protected from the effect of radiation and rain, but in other respects freely exposed to the air. They should be so fixed, as to allow the ends farthest from the bulbs to be detached readily—that of the maximum to be lifted up, and that of the minimum to be lowered, so as to let the indexes slide down to the ends of the fluid column.

The readings of both the thermometers should be made and registered daily at stated times, and the indexes re-adjusted.

Daniell's Hygrometer.

This instrument needs not to be used, if observations on the Dry and Wet-Bulb Thermometers be made.

* In the Report of the Committee on Physics (including Meteorology) on the objects of scientific inquiry in those sciences, approved by the President and Council of the Royal Society, and published by R. & J. E. Taylor, Red Lion Court, Fleet Street, price 1s., will be found useful tables of corrections to be applied to Barometer readings.

Rain.

The height of the receiving surface of the gauge above the soil should be stated, as it is found that, in a given area on the ground, and at a few feet above it, the amounts of water collected differ materially. This appears to depend on the temperature of the rain, as it has been found that, when the rain has been warm with respect to the temperature of the air, no difference has existed in the quantities of rain collected at different heights above the ground; but that, when the temperature of the air has been higher than the temperature of the rain, a difference has always been found to exist. From this it seems probable, that the rain-drops receive accession from the condensation of the vapour in the air, from being brought into contact with the relatively cold rain.

Of the Wind.

It should be distinctly stated whether the results, as given in the report, are founded on the averages of observations made throughout the day, or are only the means of strength and direction of the wind taken at single observations. It is requested that the scale of estimated strength be from 0 to 6, as it is found that, on such a scale, the square of the estimated numbers corresponds to pounds' pressure on the square foot—for instance, if the estimated strength be 1, 2, or 3, the corresponding pressures of the wind on the square foot are 1, 4, or 9 lbs. respectively.

Clouds.

In estimating the amount of Cloud, the observer will bear in mind, that it is only in the zenith that the forms and outlines of clouds are exhibited, and the space they cover and the intervals between them distinctly seen: near the horizon they are foreshortened in perspective, and their apparent magnitude diminished by distance. In estimating the amount of Cloud, regard must be had to this circumstance, and our judgment should rather be formed from the appearance of the sky, in that portion within 60° of the zenith all round, than from the appearance of the clouds within 30° of the horizon. It should be stated in the report; whether the amount of Clouds noted is formed from the average amounts during the day, or from the amounts at the times of observation.

Deductions relative to the Humidity of the Air, &c.

These should be in all cases deduced from Glaisher's Hygrometrical Tables;* and observers are requested to fill up all the columns except 22. This column will be filled up by Mr. Glaisher, who will also make the reduction of individual to mean results.

General Precautions and Recommendations.

1st—The continuity of observations ought not to be interrupted, if this can be possibly avoided, either by changes in the adjustments of instruments, or by changes in their position, &c. &c., neither should there be any change in the mode of reading off, or registering their readings.

2ndly—The observations should, if possible, be made by one person; but as this may often be inconvenient, the principal observer should instruct some member of his family how to take them, and should satisfy himself, by frequent examinations of their accuracy, that they read alike.

3rdly—As far as possible, registers should be perfect; but if, from any cause, observations should be lost, no attempt must be made to fill them up, but the blank should be left.

4thly—The observations should be made at stated and regular times, *see* Article 15 in Hygrometrical Tables.

5thly—It is recommended, before taking the means of the numbers in each month, to look down each column, to see that no evident error of entry has been made (an inch in the Barometer is a common error), to see that the maximum and minimum readings of the Thermometers have not been interchanged, &c. &c.; and before dividing the sums of the numbers, to count the days in each column on which observations have been entered, so as not to admit of any error in the division; and to use throughout decimal arithmetic.

6thly—The preceding instructions extend to no subjects of research but those required by the accompanying form: but it is very likely that observers may engage in more extended researches than are here required—and that, on particular occasions, they may wish to append to their quarterly returns an account of remarkable occurrences, such as remarkable shooting stars, or luminous meteors, noting their direction, duration, path among the stars, times of appearance and extinction; also, whether meteors are numerous on the nights of the 9th and 10th of August, and those of the 12th and 13th of November;—remarkable thunder-storms or gales of wind, &c. &c. On all such occasions, observers should endeavour to follow the spirit of the above instructions; and particularly, the means used to obtain the time at which they were noticed, should be recorded.

* Published by R. & J. E. Taylor, Red Lion Court, Fleet Street, price 2*s.* 6*d.*

QUARTERLY RETURN

OF THE

Health & Mortality in 117 Districts of England,

For the Quarter ending September 30th, 1847.

ANNUAL SERIES VI.] PUBLISHED BY AUTHORITY OF THE REGISTRAR GENERAL. [1847.—No. 3.

STATE OF THE PUBLIC HEALTH IN THE THIRD QUARTER OF THE YEAR 1847.

"The Quarterly Returns are obtained from 117 Districts, sub-divided into 582 Sub-Districts. *Thirty-six* Districts are in the Metropolis, and the remaining 81 comprise, with some agricultural Districts, the principal towns and cities of England. The population was 6,612,800 in 1841."

The deaths registered in this quarter were 49,479; a number less by one thousand nine hundred and forty-eight than were registered in the corresponding quarter of 1846; but 7,007 more than the corrected average of the September quarters of 1838—46. Upon the whole there is a slight improvement in the health of the country.

The relative salubrity of the summer season of the 10 years, 1838—1847, is displayed in the subjoined table.

	1838	1839	1840	1841	1842	1843	1844	1845	1846	1847
Deaths registered in the September Quarters of 10 years	34,752	37,317	39,498	36,058	39,409	36,953	38,933	36,139	51,427	49,479
Deaths which would have been registered if the mortality had been uniform, and the Numbers had increased from 1838 at the rate of 1·75 per cent. annually. Deduced from the average of 1838—46	36,332	36,968	37,615	38,273	38,943	39,625	40,318	41,023	41,741	42,472
UNHEALTHY SEASONS Difference above the calculated number	..	349	1,883	..	466	..	..	..	9,686	7,007
HEALTHY SEASONS Difference below the calculated number	1,580	..	..	2,215	..	2,672	1,385	4,884	..	..

From the next table of the deaths returned in each quarter since 1838, it will be seen that a small rise in the mortality took place in the spring after the mild winter of 1846—that a sudden advance occurred in summer—that the mortality reached the maximum (56,105) in the winter of 1847, and has since slowly subsided.

DEATHS REGISTERED in the Four Quarters of the Eight Years 1839—1846, and Three Quarters of 1847, in 117 of the DISTRICTS of ENGLAND and WALES.

Quarters ending	1839	1840	1841	1842	1843	1844	1845	1846	1847
March	42,410	46,376	46,967	44,903	43,748	46,136	49,949	43,850	56,105
June	41,244	42,074	39,133	38,569	40,343	38,977	40,847	43,734	51,585
September	37,317	39,498	36,058	39,409	36,953	38,933	36,139	51,427	49,479
December	41,740	44,186	39,292	39,662	42,607	44,081	39,321	53,093	....
TOTAL	162,711	172,134	161,450	162,543	163,651	168,127	166,256	192,104	....

The Mortality of the District of Lewisham, and Sub-district of Hampstead, is included in this Table throughout.

In London there has been no sign of improvement. 10,987, 12,601, and 13,187 deaths were registered in the September quarters of 1845, 1846, and 1847. The deaths in the summer quarters of the three years from *small pox* were 76, 51, and 320; *measles*, 688, 78, and 521; *scarlatina*, 194, 208, and 316; *diarrhœa*, 449, 1549, and 1196; *cholera*, 26, 197, and 98; *dysentery*, 43, 75, and 143; *remittent fever*, 8, 12, 23; *typhus*, 273, 403, and 895; *erysipelas*, 56, 92, and 126; the zymotic class of diseases generally, 2,409, 3,234, and 4,061. The deaths from diseases of the respiratory organs were nearly stationary; 1558, 1784, and 1581 persons died of consumption; 1111, 977, and 1071 persons of inflammatory and other diseases of the lungs. Two, three, and *sixteen* deaths were directly ascribed to various kinds of privation in the three last September quarters. The increase in the *deaths* by *external violence*, which were 342, 403, and 425, may have arisen from erysipelas, and other affections supervening on accidents, in an unusual proportion.

In the first nine weeks of the quarter the mean temperature of the atmosphere, and of the waters of the Thames, was above 60°; the mortality in London from diarrhœa, dysentery, and cholera, rose from 17 on the first to 188 on the seventh week of the quarter, and gradually fell to 107 on the last week. Typhus raged with unusual virulence. The weekly deaths were never below 50, and in the third week of September 111 persons died of this disease. The weekly average was 30 for the same quarter of five preceding years.

The epidemic of fever has been more fatal in Lancashire than in London. In Manchester, Salford, and Chorlton, 4154 deaths were registered from all causes. Diarrhœa and fever were the prevalent diseases. Typhus carries off men and women in the prime of life. Diarrhœa destroys more children, and becomes dangerous to adults in the form of cholera. The Registrar of *Deansgate, Manchester*, says:

"More children have died in the district during the last quarter under the age of 5 years, than in most other quarters there have been deaths at all ages. This is an astounding fact, yet perfectly consistent with prior observation; if the general mortality be large, the infant mortality will ever be found to bear its due proportion, and the causes, in such a district as this, are perfectly obvious. In the calamitous season just passed, manufactures have been almost at a stand still; food has been unattainable by the poor, for employment they had none; Famine made her dwelling in their homes, and her attendant horror, Typhus, relentlessly swept his victims to the grave. During the sickness, which either terminated in death, or rendered the removal of the poor to the fever hospitals necessary, their offspring have been neglected and uncared for; some have sunk under the malady of their parents—others, deprived of the nourishment nature had supplied, have pined and wasted away, the victims of inanition, their glands diseased, and incapable of assimilating the incongruous food supplied to them. The disease of autumn has also done its work fearfully amongst them, no less than 103 deaths, almost entirely of children, being recorded from diarrhœa, under the drain of which the exhausted frames of the little sufferers rapidly sunk. In the close, ill-ventilated, and densely-crowded rooms where the poor hive together, contagious disorders make rapid progress extending from one to another, and acquiring increased virulence from the filth and noisomeness with which they are nourished."

Liverpool, created in haste by commerce—by men too intent on immediate gain; reared without any very tender regard for flesh or blood; and flourishing, while her working population was rotting in cellars—has been severely taught the lesson, that a part of the population—whether in cellars or on distant shores—cannot suffer without involving the whole community in calamity. In itself one of the unhealthiest towns of the kingdom, Liverpool has for a year been the hospital and cemetery of Ireland. The deaths registered in the four quarters of 1846 were 1934, 2098, 2946, and 2735; in the three quarters of 1847 ending in September last, 3068, 4809, and 5669! The population of Liverpool was 223,054 at the last census. It is impossible to represent more correctly than is done by the short notes of the Registrars, the piteous spectacle which this great town presented—with the floating Lazarettos on the Mersey—the workhouses crowded with destitute paupers—the three large "sheds which will hold 300 persons, nearly full of patients at the present time"—and the fever "getting more prevalent among the upper classes."

Sub-district.—Saint Martin.

"Deaths 1026: this return shows a fearful increase of mortality in this district. Fever, diarrhœa, and dysentery, as in the last quarter, have been the prevailing diseases, but to a far greater extent. In the corresponding quarter last year, there were 700 deaths, which was the greatest number ever registered by me, but the present return shows an increase on that quarter of 326. The deaths from fever are 291, diarrhœa 174, dysentery 82.

Great Howard Street.

"Deaths 1253: This return shows an increase of 183 over the last quarter. It may be accounted for by the fact, that the floating fever hospitalt have been given up by the select vestry, and consequently more patients are sent to the north fever shed. The fever is now getting more prevalens in the upper classes in the town, though not of that fatal character which has destroyed so many indigent Irish. Diarrhœa and dysentery still prevail.

Dale Street.

"Deaths 747: being 57 less than in the preceding quarter. This may be accounted for in great measure by the removal of the lower Irish from the cellars, besides many being sent back to Ireland by the authorities; otherwise, the mortality would have been greater than in the preceding quarter.—Fever cases, 250; diarrhœa, 111; dysentry, 20; small pox, 16; measles, 11; cholera, 6.

Saint Thomas.

"Deaths 915; which include 301 who died on board the Lazarettos, on the river Mersey. Typhus and dysentery have been the prevailing diseases. The former is very much on the decrease, and the district has begun to assume a more healthy state.

Mount Pleasant.

"Deaths 956: including 630 in the workhouse, and 33 at the infirmary. There is attached to the workhouse a large fever hospital, which will hold about 128 persons; and there has also been very recently erected (for the reception of the Irish paupers) three large buildings or sheds, which will hold about 300 persons; also other buildings, all of which are nearly full of patients at the present time. The deaths this quarter are 51 less than in the last quarter.—There were 324 fatal cases of fever; 18 of dysentery; 73 of diarrhœa; and 22 of phthisis in the workhouse. There have also been 51 fatal cases of fever in this district, independently of those in the above public institutions.

Islington.

"Deaths 524: the largest quarterly number I have ever registered, principally to be attributed to fever, diarrhœa, and dysentery;—from fever in July, 38; August, 42; September, 25;—105. Diarrhœa, 78; dysentery, 37.

It will require all the energy of the inhabitants of Liverpool, and the utmost resources of science, to place the health of the town in a satisfactory condition.

The mortality remains high in Birmingham, Dudley, Wolverhampton, Shrewsbury—in many of the towns of Lancashire—in Leeds, Hull, York, and Sunderland. The returns from the other towns of the kingdom present nothing unusual, the mortality being much the same as in previous years. This refers to the relative mortality. The absolute mortality is always higher by from 10 to 50 per cent. in towns, than in open country districts. This is illustrated by a comparison of the deaths registered in London during the last 13 weeks, and of the deaths which would have happened if the rate of mortality had been the same as in Dorsetshire—one of the agricultural counties—in which the wages are low, and in which the condition of the labourer is far from what it is desirable that it should be.

	0—15	15—35	35—55	55 and upwards	All ages
Deaths registered in London in 13 weeks ending Sept. 25	6584	1786	1983	2834	13,187
Deaths which would have happened if the mortality had been at the same rate as in Dorsetshire in the September quarters 1838—44.....	3078	1709	1367	1955	8109
Excess of deaths in London during the 13 weeks	3506	77	616	879	5078

3,506 children under 15 years of age were destroyed in London, in addition to 3,078 carried off by causes which may be supposed to be the same as those fatal in the country. The mortality is equal at the age 15—35, when London receives healthy recruits from the various counties. After the age of 35 the mortality is 45 per cent. higher in London than in Dorsetshire. If the chance that a man above 35 will die in the country during the summer quarter be represented by 2, the chance that he will die in London is nearly 3. It may be admitted that part of the London population is poisoned by alcohol, and that in their houses and persons they are dirtier than the country people; still the great excess of mortality, and in part, perhaps, the intemperance and impurity must be ascribed to the crowding, the want of water, decaying animal and vegetable matters unremoved, and the inefficiency of the sewers, which neither carry off the solid, liquid or gaseous matters, poured into or generated within them every day. If the chance of dying is increased from 2 in the country to 3 in London, the liability to suffer from epidemics is raised still more.

All the diseases of the zymotic class—such as small pox, measles, scarlatina, typhus, influenza, and cholera—have the remarkable property of becoming *epidemic*. After certain intervals of time, in which they are fatal to a smaller or greater number of persons in different places and seasons, great multitudes are suddenly attacked and destroyed in a given locality; the disease in this intense form involves the neighbouring population, spreads around the whole region, and sometimes travels over the tracks of human intercourse through the world. Little is known of the immediate chemical or vital causes of epidemics; but in given circumstances, where many are immersed in an atmosphere of decaying organic matter, some zymotic disease is invariably produced; where there is starvation, it is most frequently typhus; cold, influenza; heat,—it is cholera, yellow fever, plague. At the mouths of the Ganges, of the Nile, of the Niger; in London, particularly up to the 17th century; in camps, in barracks, in ships, in prisons formerly; in Ireland, in Liverpool, in all our towns now, the circumstances in which zymotic diseases become epidemic may be witnessed.

A city breathing an atmosphere perfectly pure may not be exempt from every epidemic; but observation has shown that such irruptions are infrequent, and fatal to few persons of strength or stamina. Internal sanatory arrangements, and not quarantine or sanatory lines, are the safeguards of nations. A salubrious city in an epidemic—like a city built of stone in a conflagration—is exposed to danger and injury, but not to the same extent as the present cities of Europe, which are left without any adequate regulations for the health and security of their inhabitants.

The great historical epidemics have diminished in intensity; and there appears to be no reason why they should not be ultimately suppressed, with the advances of the population among which they take their rise. Their origin is obscure, but influenza appears generally to become first epidemic in Russia—cholera in India.* It is in India that the source of the latter disease must be attacked. If the health of India become sound, Europe might be safe, and hear no more of the epidemic which is now traversing Russia. The attention of the Indian authorities has for some time been directed to the subject. The Marquis of Wellesley in 1821 effected improvements in Bengal. Mr. Martin, one of the Commissioners appointed by the late Government, to inquire into the Health of Towns, addressed Lord Metcalfe, the Governor-General, on the sanatory improvement of Calcutta in 1835; his comprehensive plans were promoted by that eminent statesman. Lord Auckland appointed a sanatory commission, of which Sir John Grant was the chairman; and thus procured a very able official report on the health of Calcutta, before the subject was touched at home.†

The other nations of Europe are beginning to take an interest in public sanatory improvements; and any plans found to succeed in England, will no doubt be carried out as speedily as possible in all parts of Her Majesty's dominions; for the vast population that owns Her sway is intimately united. Asiatic cholera has taught us, that the lives of thousands in England may depend on the condition of the Pariahs of Jessore.‡

* In Italy, influenza is called the *catarro russo*; in Germany, the *russische krankheit*.

† See *Lancet*, Sept. 25, and Oct. 9, 1847.

‡ The epidemic cholera, which reached England in 1831, broke out at Jessore, near Calcutta, in 1817, and destroyed 10,000 persons.

TABLE
OF THE
DEATHS

In 117 of the Districts of England (including the principal Towns): shewing the Number of Deaths Registered in the Quarters ending September 30th.

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending September 30th — Years								
		1839	1840	1841	1842	1843	1844	1845	1846	1847
Total	6612800	37317	39498	36058	39409	36953	38933	36139	51427	49479
Ditto, exclusive of London	4664589	25811	28125	25332	28024	25544	26957	25152	38826	36292
Aggregate Deaths in the 11 Divisions of England.										
1 London	1948211	11506	11373	10726	11385	11409	11976	10987	12601	13187
2 South Eastern	218181	973	1059	1094	1206	1043	1120	870	1458	1228
3 South Midland	155225	758	832	785	745	719	840	804	1087	833
4 Eastern	128921	645	883	606	786	626	681	659	1014	637
5 South Western	327869	1333	1781	1541	1854	1545	2065	1366	1689	1378
6 Western	776002	3825	4793	4221	4850	3829	4657	3798	6284	5041
7 North Midland	234771	1267	1545	1204	1390	1264	1299	1340	1902	1604
8 North Western	1530460	9954	10175	9128	10212	9960	9617	9490	15224	17080
9 York	691131	3856	3829	3501	3911	3871	3761	3910	5714	4708
10 Northern	328902	1973	1904	1877	1918	1608	1609	1600	2989	2291
11 Welsh	273127	1227	1324	1375	1152	1079	1308	1315	1465	1492
Districts.										
† **London**										
West Districts	301326	1561	1597	1499	1638	1664	1822	1559	1815	1936
North Districts	376396	1900	2161	1919	2129	2065	2342	1872	2452	2543
Central Districts	374759	2523	2124	2152	2154	2123	2190	2075	2201	2452
East Districts	393247	2689	2477	2382	2540	2547	2547	2637	2859	2948
South Districts	502483	2833	3014	2774	2924	3010	3075	2844	3274	3308
S. Eastern Division										
Maidstone	32310	157	147	132	207	171	160	124	239	213
Brighton	46742	205	258	279	310	226	232	219	372	260
Isle of Wight	42547	136	197	211	172	149	186	121	178	150
Portsea Island	53036	265	256	281	285	327	345	239	433	397
Winchester	23044	136	116	105	141	106	97	89	141	135
Windsor	20502	74	85	86	91	64	100	78	95	73
S. Midland Division										
St. Albans	17051	63	76	53	84	65	100	85	114	65
Wycombe	34150	157	187	156	146	145	180	141	156	129
Oxford	19701	91	91	126	101	93	90	89	194	88
Northampton	28103	161	157	158	165	148	162	182	221	179
Bedford	31767	159	150	158	136	146	175	182	254	236
Cambridge	24453	127	171	134	113	122	133	125	148	136
Eastern Division										
Colchester	17790	74	121	94	92	76	125	89	127	118
Ipswich	25254	149	156	104	171	141	135	119	240	142
Norwich	61846	325	474	291	384	302	306	308	451	243
Yarmouth	24031	97	132	117	139	107	115	143	196	133
S. Western Division										
Devizes	22130	119	83	99	105	121	84	95	115	105
Dorchester	23380	68	89	90	104	134	99	97	116	99
Exeter	31333	150	226	256	172	184	160	160	191	175
St. Thomas	47105	182	202	186	222	177	210	149	233	145
Plymouth	36527	123	203	134	343	182	257	191	279	193
Redruth	48062	189	226	184	288	169	419	172	175	178
Penzance	50100	171	250	222	283	230	475	166	218	186
Bath	69232	331	502	370	337	348	361	336	362	297
Western Division										
Bristol	64298	350	581	410	435	330	435	347	406	349
Clifton	66233	242	405	343	425	287	350	323	436	340
Stroud	38920	160	156	149	139	155	185	163	190	148
Cheltenham	40221	140	220	193	259	189	191	138	195	155
Hereford	34427	145	155	164	201	173	184	172	183	144

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending September — Years							
		1839	1840	1841	1842	1843	1844	1845	184
Shrewsbury	21529	99	107	117	130	133	169	91	10
Worcester	27130	183	166	129	169	142	180	106	17
Kidderminster	29408	97	125	101	172	147	167	165	16
Dudley	86028	420	465	464	568	399	465	457	74
Walsall	34274	143	208	140	244	149	168	157	28
Wolverhampton	80722	392	563	434	506	422	523	438	68
Wolstanton	32669	177	194	165	210	172	163	164	31
Birmingham	138187	849	989	927	904	714	932	694	162
Aston	50928	270	334	239	284	234	316	195	46
Coventry	31028	158	125	246	204	183	229	188	30
N. Midland Division									
Leicester	50932	287	380	306	331	269	339	458	53
Lincoln	36110	166	153	184	143	171	143	154	24
Nottingham	53080	377	454	299	429	362	394	285	46
Basford	59634	234	342	214	294	233	233	262	37
Derby	35015	203	216	201	193	229	190	181	28
N. Western Division									
Stockport	85672	545	597	417	461	459	462	398	69
Macclesfield	56018	330	320	284	345	320	284	255	42
Gt. Boughton, inc. Chester	49085	282	297	272	227	231	208	227	34
Liverpool	223054	1955	2068	1757	1956	1823	1952	1963	294
West Derby, (adj. Liverpool	88652	424	516	552	632	562	602	633	114
Blackburn	75091	446	419	344	384	383	474	382	54
Preston	77189	394	505	390	482	463	450	458	64
Rochdale	60577	356	344	299	300	345	316	362	42
Bury	77496	400	384	398	436	370	380	385	64
Bolton	97519	589	666	524	548	542	534	594	82
Wigan	66032	413	432	296	357	417	353	316	61
Prescot	43739	244	202	211	219	170	174	212	32
Chorlton	93736	465	475	522	679	710	653	607	109
Manchester	192408	1444	1480	1382	1611	1729	1442	1363	235
Salford	70228	516	481	533	523	493	416	438	79
Ashton	173964	1151	989	947	1052	943	917	897	141
York Division									
Sheffield	85076	647	574	413	501	507	493	446	103
Huddersfield	107140	447	436	442	444	525	447	470	71
Halifax	109175	529	443	458	488	532	458	565	64
Bradford	132164	731	657	659	820	801	861	990	111
Leeds & Hunslet‡	168667	1023	1083	970	1133	1003	997	943	136
Hull	41130	238	385	310	270	276	258	273	48
York	47779	241	251	249	255	227	247	223	34
Northern Division									
Sunderland	56226	335	396	370	352	291	267	291	47
Gateshead	38747	243	258	242	251	198	225	265	47
Tynemouth	55625	304	301	290	359	300	239	293	50
Newcastle-on-Tyne	71850	537	475	536	458	394	414	421	85
Carlisle	36084	188	164	193	181	144	164	152	28
Cockermouth	35676	183	144	130	143	145	146	131	20
Kendal	34694	183	166	116	174	136	154	147	19
Welsh Division									
Abergavenny	50834	253	259	309	254	202	250	254	29
Pontypool	25037	127	116	137	132	89	97	132	11
Merthyr Tydfil	52864	246	299	337	261	228	397	302	37
Newtown	25958	123	117	126	79	110	101	135	8
Wrexham	39542	198	223	180	167	165	163	160	22
Holywell	40787	138	171	166	143	156	178	183	21
Anglesey	38105	142	139	120	116	129	122	149	10

* The last Quarter in London ended September 25th, 1847.

† The Mortality of the Districts of Wandsworth, and Lewisham, and Sub-District of Hampstead, is included in the above Table, in each of the nin Years, though the deaths in Wandsworth did not appear in the Weekly Metropolitan Returns till 1844; nor those of Lewisham and Hampste till 1847.

‡ The former District of Leeds is now divided into the districts of *Leeds* and *Hunslet*, both included in the present return.

A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES,

Registered in the Quarters ending September 1840-41-42-43-44-45-46-47.

S OF DEATH	Quarters ending September * YEARS 1840	1841	1842	1843	1844	1845	1846	1847
ES	11212	10567	11225	11271	11825	10842	12409	13187
Causes	11189	10506	11183	11238	11797	10802	12364	13158
notic Diseases	2279	1872	2269	2656	3243	2409	3234	4061
ADIC Diseases:—								
psy, Cancer, and her Diseases of uncertain or variable kt	1343	1297	1460	1224	1239	1111	1411	1535
eases of the Brain, inal Marrow, rves and Senses	2046	1945	1978	1883	1929	1897	1914	1831
eases of the Lungs d of the other Organs of Respiration	2833	3001	2870	2750	2782	2669	2761	2652
eases of the Heart Blood Vessels	228	221	223	285	326	371	351	369
eases of the Stomach, Liver, and other gans of Digestion	1187	982	1131	1146	1027	1099	1356	1284
eases of the Kidrs, &c.	64	59	75	67	90	101	138	122
dbirth, Diseases of Uterus, &c.	107	108	94	114	124	120	132	146
matism, Diseases the Bones, Joints,	61	57	68	78	84	71	116	109
eases of the Skin, bular Tissue, &c.	16	10	18	17	12	27	29	45
Age	716	667	691	679	648	569	487	540
ence, Privation, Intemperance	309	287	306	339	293	358	435	464
all Pox	254	129	126	75	556	76	51	320
asles	311	260	313	352	255	688	78	521
rlatina	524	193	392	548	1020	194	208	316
oping Cough	198	462	180	336	167	385	355	238
up	90	72	92	76	76	75	66	62
rush	132	104	115	106	120	105	113	82
rrhœa	279	228	489	455	414	449	1549	1196
sentery	29	29	73	121	44	43	75	143
olera	53	23	106	60	47	26	197	98
luenza	12	8	13	18	8	8	6	6
ue	3	3	2	5	6	6	1	6
nittent Fever	8	5	5	5	13	8	12	23
hus	305	297	309	446	424	273	403	895
ysipelas	75	49	45	39	85	56	92	126
philis	6	10	7	13	8	17	28	29
drophobia	..	..	2	1	..	..	..	..
ammation	71	53	67	34	7	..	..	..
morrhage	40	38	41	29	30	29	26	27
opsy	423	376	418	316	312	227	140	171
scess	48	47	34	23	30	19	14	31
ma	..	..	..	..	..	7	3	9
rtification	71	53	41	56	45	34	34	41
rpura	6	5	4	6	7	11	9	22
ofula	32	24	24	45	45	32	84	68
cer	99	103	111	151	121	160	195	194
nor	32	27	27	5	11	8	4	3
rt	9	9	16	4	10	11	19	10
ophy	102	131	175	154	201	233	473	481
bility	272	265	299	262	287	221	299	298
formations	13	7	9	21	25	28	48	54
dden Deaths	125	159	194	118	108	91	63	126
nalitis	164	155	173	139	164	159	165	131
drocephalus	473	450	514	465	413	421	448	415
oplexy	197	194	169	186	237	266	273	276
alysis	208	141	166	175	166	184	221	226
nvulsions	831	813	758	700	721	608	513	521
anus	5	3	2	5	9	4	2	4
rea	..	..	2	..	2	4	1	1
lepsy	39	41	45	49	54	78	74	70
anity	7	8	7	13	19	8	25	27
irium Tremens	18	20	25	32	22	33	44	29
ease of Brain, &c.	104	120	117	119	122	132	148	131

CAUSES OF DEATH	Quarters ending September * YEARS 1840	1841	1842	1843	1844	1845	1846	1847
IV.—Laryngitis	3	5	6	10	7	17	25	28
Quinsey	19	15	20	24	32	5	14	16
Bronchitis	72	92	66	82	140	191	271	330
Pleurisy	23	16	7	17	23	28	30	35
Pneumonia	613	739	626	545	617	600	399	409
Hydrothorax	52	40	27	45	38	46	32	34
Asthma	129	119	83	116	104	101	95	96
Phthisis or Consumption	1801	1852	1889	1781	1681	1558	1784	1581
Disease of Lungs, &c.	121	123	146	130	140	123	111	123
V.—Pericarditis	10	4	5	13	28	12	20	20
Aneurism	14	6	8	11	8	11	10	18
Disease of Heart, &c.	204	211	210	261	290	348	321	331
VI.—Teething	350	258	319	275	233	217	138	163
Gastritis	393	322	415	309	15	18	28	24
Enteritis					264	212	213	190
Peritonitis	17	11	12	22	26	31	56	57
Tabes Mesenterica	79	74	84	137	136	188	343	306
Worms	5	5	4	9	6	10	9	10
Ascites	12	9	11	15	27	19	26	21
Ulceration (of Intestines, &c.)	20	17	24	39	18	38	43	41
Hernia	14	25	17	13	20	18	36	28
Colic or Ileus	11	29	35	29	37	29	35	45
Intussusception	13	6	1	7	3	14	8	18
Stricture	7	2	6	7	5	5	11	7
Hæmatemesis	3	6	6	10	13	7	16	15
Disease of Stomach, &c.	87	58	41	93	86	93	116	102
Disease of Pancreas	1	..	..	..	..	..	..	1
Hepatitis	15	21	14	21	21	33	71	56
Jaundice	32	23	29	36	28	29	42	41
Disease of Liver, &c.	126	115	111	118	89	135	162	158
Disease of Spleen	2	1	2	6	..	3	3	1
VII.—Nephritis	7	6	3	4	5	4	6	5
Ischuria	3	..	2	1	..	..	2	2
Diabetes	2	4	9	3	2	13	8	9
Cystitis	1	1	2	5	3	3	7	10
Stone	10	6	9	3	7	11	9	7
Stricture	3	5	10	9	17	11	13	8
Disease of Kidneys, &c.	38	37	40	42	56	59	93	81
VIII.—Childbirth	75	61	68	76	82	70	80	91
Paramenia	..	4	2	6	1	4	4	6
Ovarian Dropsy	4	9	3	5	3	6	13	3
Disease of Uterus, &c.	28	34	21	27	38	40	35	46
IX.—Arthritis	..	..	..	3	1	1	..	3
Rheumatism	27	31	32	26	31	31	62	45
Disease of Joints, &c.	34	26	36	49	52	39	54	61
X.—Carbuncle	1	1	2	1	1	3	1	3
Phlegmon	1	..	..	1	1	5	7	7
Ulcer	6	3	5	5	1	6	9	20
Fistula	4	2	3	5	3	7	3	2
Disease of Skin, &c.	4	4	8	5	6	6	9	13
XI.—Old Age	716	667	691	679	648	569	487	540
XII.—Intemperance	8	10	7	12	8	14	29	23
Privation	3	5	3	13	3	2	3	16
Violent Deaths	298	272	296	314	282	342	403	425
Causes not specified	23	61	42	33	28	40	45	29

e mortality of the district of Lewisham, and sub-district of Hampstead, was included in the Metropolitan Returns at the commencement of 1847, for the first time. the deaths for previous years are not contained in the above table. In the Quarters ending September they were respectively (1840) 161; (1841) 159; (1842) 160; 8; (1844) 151; (1845) 145; (1846) 192.

der the head of *sudden deaths* are classed not only deaths described as sudden, of which the cause has not been ascertained or stated; but also all deaths returned roner in vague terms, such as "found dead," "natural causes," &c. &c.

DEATHS REGISTERED in LONDON in the 13 Weeks ending SEPTEMBER, 25th, 1847.

WEEKS ENDING	AGES 0—15	15—35	35—55	55 & up.	All Ages
July, 3rd	376	160	174	223	933
,, 10th	423	106	145	208	882
,, 17th	432	150	149	213	944
,, 24th	444	133	125	203	905
,, 31st	517	117	156	174	964
Aug. 7th	541	152	138	187	998
,, 14th	601	128	135	244	1108
,, 21st	560	114	151	232	1057
,, 28th	554	131	153	246	1084
Sept. 4th	514	145	171	221	1051
,, 11th	555	148	143	194	1040
,, 18th	550	177	184	258	1169
,, 25th	517	145	159	231	1052
TOTAL	6584	1786	1983	2834	13187
Deaths which would have been registered if the mortality had been the same as in Dorsetshire, Sept. quarters, 1838—44.	3078	1709	1367	1955	8109
Excess of Mortality in London	3506	77	616	879	5078

COMPARATIVE METEOROLOGY OF THE SUMMER QUARTERS OF THE YEARS 1845, 1846, & 1847.

(Deduced from the Greenwich Observations.)

Quarters ending	Years	Mean height of the Barometer, from 936 observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS: Highest during the quarter	Lowest during the quarter	Mean: Of the Highest on each day, from 78 observations	Mean: Of the Lowest on each day, from 78 observations	Mean: Difference in degrees	Mean of 936 observations	Dew Point: Mean of 936 results	Self-Registering: Highest in the sun: During the quarter	Highest in the sun: Mean of 91 observations	Lowest on the grass: During the quarter	Lowest on the grass: Mean of 91 observations	In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'clock. MEAN: Of the highest on each day from 91 observations.	MEAN: Of the lowest on each day from 91 observations.	Difference between the dew point temperature and air temperature: Mean of 936 differences	Mean of the greatest on each day, 78 observations	Mean of the least on each day, 78 observations	Difference between the mean temperature of the quarter, and the mean temperature of the same quarter on an average of 25 years	WIND: Pressure in lbs. on the square foot: General direction	Greatest pressure in the quarter	Mean for the quarter	The mean weekly amount of Horizontal movement of the air	Mean amount of Cloud, 0-10	Rain in inches (91 days)
Sept....	1845	29.768	80.5	35.3	65.0	50.1	14.9	57.1	52.3	111.6	87.1	22.5	44.2	61.0	60.6	4.8	10.7	0.9	—3.8	..	9.0	0.4	917	6.9	7.00
	1846	29.797	88.4	43.0	72.3	55.3	17.0	63.1	56.6	115.8	94.5	32.0	47.7	*67.6	65.8	6.5	15.0	0.8	+2.1	..	9.0	0.2	751	6.7	8.03
	1847	29.871	86.0	39.0	70.9	52.5	18.4	61.3	54.7	108.5	87.3	30.0	44.1	65.2	62.9	6.6	13.9	1.1	+0.3	..	12.0	0.1	838	6.6	4.61

* Mean of 63 observations.

DEATHS in LONDON from all Causes (exclusive of Violent and Sudden Deaths), and from Diarrhœa, Dysentery, and Cholera, in the 13 Weeks of the Summer Quarters 1845, 1846, and 1847.

Number of Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
Deaths from all causes, exclusive of Violent & Sudden Deaths .. 1845	757	756	829	858	810	852	834	821	796	742	804	739	811	10,409
1846	894	882	1026	976	1063	1100	925	870	875	850	880	819	783	11,943
1847	835	857	921	871	926	940	1070	1043	1054	1002	998	1109	1010	12,636
Deaths from Diarrhœa, Dysentery, and Cholera 1845	15	30	30	50	41	50	48	42	38	38	46	38	52	518
1846	76	98	149	187	218	238	180	169	148	126	87	83	62	1,821
1847	17	38	47	67	125	128	188	172	157	135	139	117	107	1,437
Mean Temperature 1845	61.3	60.9	59.6	60.0	56.3	59.5	55.6	56.5	57.6	54.6	55.8	55.0	50.0	57.1
1846	65.0	60.0	64.9	62.6	70.6	66.5	61.8	60.8	62.6	61.6	64.5	60.3	59.2	63.1
1847	61.3	65.5	70.2	63.1	65.9	62.6	63.2	64.1	60.3	54.3	56.3	54.1	56.1	61.3

DEATHS in Eight Quarters of the Years 1845—1847.

	Liverpool	Manchester	Birmingham
1845—December	1982	1413	777
1846—March	1934	1527	876
June	2098	1611	842
September	2946	2354	1627
December	2735	2318	1341
1847—March	3068	2185	1187
June	4809	2362	1263
September	5669	2783	1161

REGISTRARS' NOTES.

The following Instruction was addressed to the 447 Registrars in the Country:—

> "If at any time the number of deaths registered during the Quarter has been *above the average*, state, in a note at the foot of the Return, whether any epidemic disease, such as Measles, Typhus, &c., has been prevailing in the District, or if there be any other known circumstance which will account for the increase."

The Registrars alone must be held responsible for the opinions expressed in any of the subjoined Notes.

SUP. REG. DISTRICT	REG. DISTRICT	
PORTSEA ISLAND	*Kingston and Landport*	Deaths 119; exceeding those of the corresponding quarter of last year by 8. Diarrhœa has been a prevailing and fatal complaint among persons of all ages.
BEDFORD	*Bedford and Cardington*	Deaths 72. This number is above the average mortality of the district, in consequence of the prevalence of scarlet fever, the deaths from which disease, and its sequelæ, were 15. Scarlet fever in all its forms, from the mildest to the most malignant, and followed by several of its sequelæ, is now prevailing in many parts of this district. In the severer cases, the accompanying fever speedily assumes a low type, and the disease prevails principally among the poorer classes. It has been observed, moreover, that in the localities in which typhus has prevailed on former occasions, the cases of scarlet fever have been the most numerous during the present epidemic. 5 deaths only from typhus have been registered, whereas, in the corresponding quarter of last year, the mortality from this disease was very considerable. There have also been 5 deaths from diarrhœa among children.
———	*Bedford and Kempston*	Deaths 84: being considerably augmented by the prevalence of typhus fever and scarlatina throughout the quarter. 18 deaths have been registered from the former, and 16 from the latter. 38 deaths are of children under 7 years of age, principally from scarlatina.
———	*Harrold*	Deaths 18. Typhus and scarlet fever prevail.
EXETER	*St. David*	Deaths 89. This number is considerably above the average; the deaths from hooping-cough were 13.
ST. THOMAS	*Kenton*	Deaths (22) below the average. Typhus fever has been prevalent.
BATH	*The Abbey*	Deaths 60: being about the average. The Vaccination Act is very fully carried out in this city. One fatal case of small-pox was registered, the first which has occurred in this district for two years. The following circumstances connected with it deserve to be recorded. The eldest child in the family had small-pox after vaccination, and did well. The second, who had been vaccinated, slept with others who had the disease, but escaped. The third, who had suffered small-pox when 7 days old, and bore distinct marks of the disease, was attacked the second time when 16 years old, and died on the 16th day of the eruption. The fourth, whose death is now registered, had never been vaccinated, and died on the 11th day of the eruption. The fall in the price of bread and potatoes to about half of the spring price, has been attended with a decrease of disease and mortality. Scurvy has disappeared, and autumnal diseases are less rife than usual. The price of potatoes is still above the average. Well-marked instances of the disease in this vegetable have fallen under the Registrar's observation, but the present price is accounted for by the smallness of the quantity planted, not by the deficiency or bad quality of the crop.
BRISTOL	*St. Mary Redcliff*	Deaths 101: an increase which arises from diarrhœa and typhus.
SHREWSBURY	*St. Mary*	Deaths 95: being 15 above the average. Typhus is still prevalent, but confined to one or two districts, viz. a row of houses built back to back, the lower floors below the bottom of the adjoining canal—and the north side of Castle Foregate, which consists of many lodging-houses, situated in close passages and in small squares, having entrances under archways, and frequently having pigsties and open privies, and heaps of ashes within a few yards of the doors. The cases of typhus have nevertheless generally done well, only 3 deaths having occurred this quarter. 11 cases of diarrhœa and 8 cases of measles will account for the increased mortality. Out of 95 deaths, 17 were not certified, having had no medical attendant, although the greatest facility is here offered, and the very poorest can readily obtain it. Of the uncertified, there were 10 under one year.
WORCESTER	*Worcester, North*	Deaths 68. Small-pox has been prevailing; five fatal cases are registered this quarter.
DUDLEY	*Sedgley*	Deaths 186—which is rather more than the average, and more than in any other corresponding quarter, owing principally to measles and fever. Scarlet fever has been very prevalent in this district during the last month, and appears to continue. Deaths from fever, 46; measles, 20; and diarrhœa, 16.
WALSALL	*Darlaston*	Deaths 73: being 59 less than in the corresponding quarter of last year. Measles extensively prevails, but is generally of a favourable character.
WOLVERHAMPTON and SEISDON	*Wolverhampton, Eastern*	Deaths 291: a greater number than in any previous summer quarter, being 106 above the summer quarterly average. Scarlatina, typhus and maculated fever have been, and still are, very prevalent throughout the district, to which causes the increase is principally owing.
———	*Wolverhampton, Western*	Deaths 120: 16 were from typhus, and 7 from scarlatina. In 20 cases there was no medical attendant.

SUP. REG. DISTRICT	REG. DISTRICT	
WOLVERHAMPTON and SEISDON	*Willenhall*	Deaths 98: rather more than the average, caused by 16 cases of fever and 13 of diarrhœa.
WOLSTANTON and BURSLEM	*Burslem*	Deaths 108: 51 below the corresponding quarter of last year; 7·6 above the average of the corresponding quarters of the last five years. There is a good deal of fever in this district (a sort of purpura), but it is not often fatal.
BIRMINGHAM	*St. George*	Deaths 210: being 114 less than in the corresponding quarter of last year.
———	*St. Mary*	Deaths 273: 16 more than in the corresponding quarter of last year, and an increase of 110 on the average of the first nine years; the chief causes are—fever, 61; phthisis and marasmus, 46; and diarrhœa 32.
———	*St. Paul*	Deaths 75. This quarter has been marked by the prevalence of diarrhœa and scarlatina, most of the latter of an aggravated character. Diarrhœa caused 10, scarlatina 12 deaths.
———	*St. Martin*	The number of deaths (140) is above the average. 31 were from diarrhœa, 18 from phthisis, and 16 from typhus and scarlatina.
LEICESTER	*East Leicester*	Deaths 203: less by 131 than in the same quarter of 1846.
———	*West Leicester*	Deaths 140: 62 less than in the corresponding quarter of last year.
LINCOLN	*South*	Deaths 59: this is less than the average, although in one or two villages typhus has been prevalent.
NOTTINGHAM	*St. Ann*	Deaths 155: 7 less than in the last quarter, yet considerably more than the average; arising from measles and hooping cough.
BASFORD	*Arnold*	Deaths 29: considerably below the average. Measles has been very prevalent in one part of the district, (Calverton), and was fatal to 5 children.
———	*Greasley*	The number of deaths (62) is considerably below the average. This may be accounted for by the absence of all epidemics with the exception of typhus, which, although still prevalent in the district, has not proved fatal in nearly so large a proportion of cases.
DERBY	*St. Peter*	This number (197) is considerably above the average. There have been 15 cases of typhus; 34 of consumption; and 17 of diarrhœa.
———	*St. Alkmund*	This return (102) is above the average, chiefly owing to the prevalence of fever, of which there have been 16 cases.
STOCKPORT	*Stockport (First)*	The number of deaths (219) is above the average. Typhus, diarrhœa, and scarlatina, have been very prevalent, and proved fatal in many instances.
———	*Hyde*	Deaths 77: which is below the average. Typhus has been prevalent principally among the Irish, but owing to their speedy removal to the fever ward, few deaths have occurred.
———	*Heaton Norris*	Deaths 109: being 9 less than the quarterly average; 18 occurred in the fever hospital, but of these probably not more than two were of persons who resided in this district. 16 cases had no medical attendance.
———	*Cheadle*	Deaths 19: dysentery has been very prevalent, but only one case fatal.
———	*Hazelgrove*	Deaths 27: being above the average. Scarlatina is rather prevalent, but not fatal.
MACCLESFIELD	*West*	Deaths 121: typhus has been prevalent, the deaths from which, together with scarlatina and other fever, have caused the mortality to exceed the average.
———	*Sutton*	The number of deaths (65) is above the average. There have been 9 from typhus. It is to be feared that some of the deceased, owing to the want of employment, had not a sufficiency of food to support them.
LIVERPOOL	*Saint Martin*	Deaths 1026: this return shows a fearful increase of mortality in this district. Fever, diarrhœa, and dysentery, as in the last quarter, have been the prevailing diseases, but to a far greater extent. In the corresponding quarter last year, there were 700 deaths, which was the greatest number ever registered by me, but the present return shows an increase on that quarter of 326. The deaths from fever are 291, from diarrhœa 174, dysentery 82.
———	*Great Howard Street*	Deaths 1253: This return shows an increase of 183 over the last quarter. It may be accounted for by the fact, that the floating fever hospitals have been given up by the select vestry, and consequently more patients are sent to the north fever shed. The fever is now getting more prevalent in the upper classes in the town, though not of that fatal character which has destroyed so many indigent Irish. Diarrhœa and dysentery still prevail.
———	*Dale Street*	Deaths 747: being 57 less than in the preceding quarter. This may be accounted for in a great measure by the removal of the lower Irish from the cellars, besides many being sent back to Ireland by the authorities; otherwise, the mortality would have been greater than in the preceding quarter.—Fever cases, 250; diarrhœa, 111; dysentery, 20; small pox, 16; measles, 11; cholera, 6.
———	*St. Thomas*	Deaths 915: which include 301 who died on board the Lazarettos, on the river Mersey. Typhus and dysentery have been the prevailing diseases. The former is very much on the decrease, and the district has begun to assume a more healthy state.
———	*Mount Pleasant*	Deaths 956: including 630 in the workhouse, and 33 at the infirmary. There is attached to the workhouse a large fever hospital, which will hold about 128 persons; and there have also been very recently erected (for the reception of the Irish paupers) three large buildings or sheds, which will hold about 300 persons; also other buildings, all of which are nearly full of patients at the present time. The deaths this quarter are 51 less than in the last quarter.—There were 324 fatal cases of fever; 18 of dysentery; 73 of diarrhœa; and 22 of phthisis in the workhouse. There have also been 51 fatal cases of fever in this district, independently of those in the above public institutions.

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LIVERPOOL	*Islington*	Deaths 524: the largest quarterly number I have ever registered, principally to be attributed to fever, diarrhœa and dysentery;—from fever in July, 38; August, 42; September, 25;—105. Diarrhœa, 78; dysentery, 37.
WEST DERBY	*West Derby*	Deaths 299: shewing an increase of 72 as compared with the last quarter. Fever is on the decrease, but dysentery and pulmonary complaints are prevalent. 100 deaths were caused by typhus.
———	*Everton*	Deaths 294: from typhus and other fevers, 70; dysentery, 23; diarrhœa, 26 deaths.
———	*Toxteth Park*	The number of deaths (578) shews an increase of 147, compared with June quarter, 1847:—From typhus, there were 63; diarrhœa, 90; dysentery, 26; small pox, (vaccinated) 2; (not vaccinated), 6.
PRESTON	*Preston*	Deaths 449: being 68 less than in the same quarter of last year, but 10 above the average of corresponding quarters. 103 were caused by diarrhœa and dysentery, which have been the prevailing complaints; 20 by typhus, and 21 by measles.
ROCHDALE	*Spotland Nearerside*	The number of deaths (54) is above the average of corresponding quarters. Typhus fever has been prevalent, and in many cases fatal.
BOLTON	*Eastern*	Deaths 250: this return exhibits the greatest number of deaths which have occurred in this district since the Registration act came into operation. It exceeds those of the corresponding quarter—of 1844, by 116; of 1845, by 112; of 1846, by 61; and is 27¾ more than the average of the previous year, although the mortality during that year was more than that of the former years. The increase is chiefly attributable to the number of Irish cases of fever, and the erection of a fever hospital in this district, in which typhus cases have been treated. Diarrhœa appears to have been very prevalent; scarlatina, dysentery, measles, and hooping cough, may also account for a portion of the increase. 2 cases of small pox before, and 3 after vaccination have been fatal.
———	*Western*	The number of deaths (175) is above the average of the corresponding quarter of former years, owing principally to the prevalence of diarrhœa, dysentery, small pox, and typhus. Deaths from typhus, 33; diarrhœa and dysentery, 38; scarlatina, 8; small pox, 9. With reference to the small pox, in every case it was the first attack, and none had been vaccinated. Typhus is on the decrease in this district.
———	*Little Bolton*	Deaths 103: this district is at present in a healthy state. There has been about an average number of deaths this quarter, as compared with the corresponding quarter of the last ten years. There have been few cases of Irish fever. 4 deaths have occurred from typhus; and one from small pox without previous vaccination.
WIGAN	*Wigan*	Deaths 308: the very high rate of mortality, with which this town has been visited during the past and present year, has at length aroused the authorities to a sense of their duty. Active measures are now being made to obtain a sanitary and general improvement Act in the next Session of Parliament. During the last quarter, in that part of the district where disease was most prevalent, the unemployed operatives were engaged in whitewashing the dwellings of the poor, which has had a very salutary effect. In the 308 deaths registered during the past quarter, 43 have occurred from diarrhœa; 27 from dysentery; 37 from typhus; 27 from small pox; and 24 from consumption.
PRESCOT	*Prescot*	Deaths 117. The cases of typhus in this district are as numerous as ever, though the effects of it are certainly much less fatal; the deaths from it, and all other fevers, are not half so numerous as they were in the quarter ending June 30th. This may be attributed to the unremitting attention of the medical gentlemen who are appointed by the board of guardians for the Prescot district, and whose attention to the fever patients is beyond all praise. In other respects, the district may be considered as in a healthy state, as there is no other epidemic disease.
———	*Much Woolton*	Deaths 42. The mortality of this district is still very great, the deaths registered being only one less than in the preceding quarter, and 16 more than in the corresponding quarter of last year, making a total of 160 for the year ending September 30, 1847—whilst, in the year ending September 30, 1846, there were only 88 registered. 28 of the deaths registered this quarter have been from the following causes: typhus, 7; small-pox (without vaccination), 8; dysentery and diarrhœa, 7; phthisis, 6. In no case has small-pox been fatal where vaccination had been performed.
CHORLTON	*Chorlton upon Medlock*	Deaths during the quarter have been 235, viz. males 108, females 127; corresponding quarter last year, 286. Mortality up to five years of age, 137; at sixty years and upwards, 22. The prevailing diseases have been affections of the bowels, no less than 74 cases having been recorded—53 under the head of diarrhœa, and 21 of dysentery: of these, 41 occurred under one year of age; 7 one to two years; and 11 two to three years of age. With but very few exceptions, those who have fallen victims to the above diseases have belonged to the more humble and working classes; and as no less than 41 occurred during lactation, may not their complaints have originated from impoverished food, as many of their parents have not been in a condition to command that diet which is essential for the growth of the animal frame? 28 cases of typhus have been registered—18 from the Fever ward, and 10 from among the labouring classes, who dwelt chiefly in crowded apartments, in densely-populated districts. The more wealthy portion of the community have been remarkably exempt from disease.
———	*Hulme*	Deaths 356. We have had a great deal of sickness in this district during the last quarter; and although the number of deaths only exceed those of the previous quarter by 35, that must not be regarded as a criterion to judge of the extent of disease. The fever cases which have occurred amongst the poor have been removed to a house of recovery in another district of the Union, provided by the guardians for the reception of those cases. Dysentery and diarrhœa have been very prevalent, and there have been 129 deaths registered from those causes. The mortality among young children has been great; 180 have died not exceeding two years of age—nearly one-half of the aggregate number. I have long been apprehensive, and am every day more confirmed in the opinion, that there is a much greater amount of infantile life sacrificed by the use of narcotic medicines than is generally known or supposed, and that many infants (where no medical certificate of the cause of death is produced) are registered as dying from convulsions, of a few hours' duration, which have been induced by an over-dose of opium, contained in those various nostrums sold to quiet and lull infants. I do not mean to insinuate that they are given with any criminal intention, for their

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CHORLTON ..... *Hulme (continued)* ..... administration is often prompted by the most humane intentions, and the tender solicitude of parents for their suffering offspring, under the impression that they have no other than a soothing and beneficial effect: it cannot, however, be too soon or too extensively made known, that the use of all such medicines has a baneful influence upon children, laying the foundation of debilitated constitutions, inducing lingering, wasting disease, and oftentimes, I am fully convinced, the cause of convulsions and sudden death when not suspected.

MANCHESTER ..... *Ancoats* ..... The number of deaths (608) is less than in the corresponding quarter of last year; yet it is much above the average for the same quarter in previous years. Diarrhœa and fever have been the most fatal diseases. The mortality was highest in the month of August, and lowest in that of September.

——— ..... *St. George* ..... The number of deaths (438) is considerably above the average: deaths registered during the quarter ending Sept. 30, 1845, 229; Sept. 30, 1846, 389. Deaths from fever and diarrhœa have been unusually great. The following have been the principal causes of deaths—diarrhœa 84, fever 55, convulsions 38, consumption 34, marasmus 32, scarlatina 22, bronchitis 14, small-pox 11, hooping-cough 11.

——— ..... *Market Street* ..... Deaths 636. At the workhouse, New Bridge-street, in the quarter just terminated, 154 entries of death have been made: at the fever hospital, Irk Mills, Long Millgate, 159 deaths have been registered: 62 deaths have taken place at the workhouse, Tib-street, now discontinued as a receptacle for diseased persons: 45 deaths at the infirmary (including coroner's inquests) have been registered, a number below the average at that institution. The registration in the district, exclusive of the above, comprises 216 deaths, a number varying but slightly from the returns made for several consecutive quarters.

——— ..... *London Road* ..... Deaths—total 437: males 301, females 136. In the temporary hospital located in this district during last quarter, but now discontinued, male patients were exclusively admitted. The number of deaths is above that of 1846 by 49; of 1845 by 218 (about 50 per cent.) In September, 1846, the weather was unusually hot; there were 156 cases of diarrhœa, and of fever 31: in the quarter for 1847, there have been but 64 of diarrhœa, and 165 of fever—these two diseases, in both periods, averaging about one-half of the total causes of death. The fever which has been so prevalent, not inaptly named "famine fever," although numbering 134 cases above those of 1846, and 148 above the average of 1845 and 1844, must not be referred to as marking an unusual mortality in this district. Out of 165 cases, 95 of the deaths occurring in the temporary hospital were of persons not belonging to the district, and there were 29 others, whose previous residence does not appear to have been known. If, therefore, the number of the non-resident, and one-half of those of doubtful locality, be deducted, the precise number of deaths from fever in the London-road district would be but 41—10 only above that of 1846. This number, however, is greater than that of any preceding year.

By the annexed table it will be seen that, in 1846, diarrhœa included 40 per cent. of the deaths, and fever 8 per cent.: in the quarter of this year, fever takes the place of diarrhœa, numbering 37 per cent. and diarrhœa 14. It follows, therefore, deducting the cases of deaths in the fever-wards of non-resident persons, that notwithstanding the gross increase of mortality from fever, the diminished number of cases of diarrhœa has served to equalize the actual deaths in the district, which, the allowance being made, would be under those of the last year. Of the 13 principal causes of death given in the table as occurring during the corresponding period of four years, it may be observed, that there have been 7 cases of dysentery and 6 of small-pox. The number of pneumonia cases has been comparatively few.

No. of deaths in the September quarter.				13 principal causes of death, September quarter.	Proportion per cent. of deaths in the September quarter.			
1847	1846	1845	1844		1847	1846	1845	1844
165	31	8	12	Fever	37.75	8 00	4.25	4.87
64	156	28	40	Diarrhœa	14.64	40.20	14.90	16.24
27	26	16	24	Phthisis	6.18	6.70	8.51	9.74
26	22	15	20	Convulsions	5.95	5.67	7.98	8.12
20	15	14	11	Teething	4.58	4.38	7.45	4.46
16	17	10	14	Old age, decay	3.66	4.37	5.32	5.68
14	20	6	13	Marasmus	3.20	5.15	3.20	5.49
8	15	17	22	Pneumonia	1.83	3.87	9.04	8.93
8	11	19	11	Infantile debility	1.83	2.83	10.10	4.46
7	—	—	—	Dysentery	1.60	— —	— —	— —
7	6	14	1	Hooping cough	1.60	1.65	7.45	0.41
6	8	2	10	Scarlatina	1.37	2.06	1.06	4.06
6	—	1	—	Small pox	1.37	— —	0.53	— —
374	327	150	178	Death from 13 causes	85.56	84.88	83.79	72.46
63	61	38	68	All other	14.44	15.12	16.21	27.54
437	388	188	246	Totals	100.00	100.00	100.00	100.00

——— ..... *Deansgate* ..... The mortality in my district during the last quarter (467) has been excessive—more than 200 higher than the average; and it will be found that the infant mortality constitutes, as usual, a large proportion—considerably more than half the total number of deaths being those of children under the age of 5 years, viz. under one year, 148; between one and two years 67, two and three years 23, three and four years 16, four and five years 15—total 269. Amongst the causes of death at all ages are found—typhus 54, scarlet fever 37, measles 7, small-pox 7—total 105; from what may, in some of their stages, be all classed as exanthemata. From bowel complaints, registered under the names diarrhœa, dysentery, &c. there have been 103 deaths; and from "wasting," generally called consumption, but registered as marasmus, 42 deaths. The deaths of 308 persons have been certified, whilst the remaining 159 had no proper medical attendance whatever. The numbers above indicated tell a wondrous tale of suffering and woe. The infant mortality alone is greater than the average total mortality; more children have died in the district during the last quarter under the age of 5 years, than in most other quarters, there have been deaths at all ages. This is an astounding fact, yet

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MANCHESTER	*Deansgate (continued)*	perfectly consistent with prior observation; if the general mortality be large, the infant mortality will ever be found to bear its due proportion, and the causes, in such a district as this, are perfectly obvious. In the calamitous season just passed, manufactures have been almost at a stand-still; food has been unattainable by the poor, for employment they had none; Famine made her dwelling in their homes, and her attendant horror, typhus, relentlessly swept its victims to the grave. During the sickness, which either terminated in death, or rendered their removal necessary to the fever hospitals, the offspring of the poor have been neglected and uncared for; some have sunk under the malady of their parents—others, deprived of the nourishment nature had supplied, have pined and wasted away, the victims of inanition, their glands diseased, and incapable of assimilating the incongruous food supplied to them. 42 deaths from marasmus! The disease of autumn has also done its work fearfully amongst them, no less than 103 deaths, almost entirely of children, being recorded from diarrhœa, under the drain of which, the exhausted frames of the little sufferers rapidly sunk. In the close, ill-ventilated, and densely-crowded rooms where the poor hive together, contagious disorders make rapid progress, extending from one to another, and acquiring increased virulence from the filth and noisomeness with which they are nourished. We find that 37 deaths have occurred from scarlet fever. There is perhaps no disease with which we are acquainted, whose subjects so much require an abundant supply of pure, cool air, as scarlatina. The heat of the system runs highest in this—higher, probably, than in any other disease, and an abundant supply of air which shall dilute the poison, and whose ever-flowing coolness shall assuage the burning fever of the sufferer, will always afford him the best chance of recovery. The value of cold was amply proved by Currie, in his treatment of scarlatina by cold affusion. It is greatly to be lamented that diseases, which, when taken early, are generally so remediable, as the enteritic affections of children, should, from neglect, be allowed to destroy so many. The mortality from these causes is absolutely frightful. I am expressing the deliberate conviction of myself and some experienced brother practitioners in asserting, that two-thirds of the children whose deaths are recorded from these causes ought to have been saved. The deaths from fever (54) are considerable: at one period during the quarter they diminished, but a stoppage of the mills brought famine and its attendant again. Amongst the memorabilia, I find recorded the death of a man 107 years of age; also that of a child which lived 4 weeks, and was asserted to have been born at the end of the fifth month of pregnancy.
———	*Blackley*	Deaths 35: being above the average. Scarlet fever has been prevalent—15 out of the number were caused by that disease.
SALFORD	*Greengate*	Deaths 288: about 80 above the average of the summer quarters; 37 were caused by typhus, and 87 by diarrhœa. The latter disease has been very prevalent among children, 52 having died from that cause under the age of one year, and 17 between one and five. Typhus has been more fatal to adults, 22 being aged 35 and upwards. Deaths in the fever-ward, 17.
ASHTON and OLDHAM	*Ashton Town*	Deaths 244: being above the average. Typhus continued to prevail in the beginning of the quarter. Premises provided by the Board of Guardians for the reception of fever cases, were opened at the latter end of June. The deaths there by typhus were 16 in July, 8 in August, and 3 in September; nearly three-fourths of the persons were brought from parts of the union out of the district. 7 cases occurred from small pox without previous vaccination, and 2 from measles. Diarrhœa and dysentery have been more prevalent than usual.
———	*Hartshead*	Deaths 105: this is rather more than usual. I find there have been 4 cases of measles; 2 of scarlet fever; 6 of typhus fever; and 6 of small pox; which, perhaps, account for the increase.
———	*Dukinfield*	Deaths 173: being 70 less than in the corresponding quarter of 1846. Typhus was fatal in 14 cases; scarlatina in 7; measles in 9; diarrhœa and dysentery in 18; and small pox (without previous vaccination) in 4. Typhus has prevailed much in this district, but, owing to the establishment of a fever ward at Ashton, the number of deaths from that cause is less.
———	*Oldham below Town*	The number of deaths (246) is more than usual, in consequence of scarlet fever and typhus being prevalent; 18 were caused by the former disease; and 23 by fever. The mortality is now on the decrease.
———	*Middleton*	The number of deaths (59) is 20 more than were registered in the corresponding quarter of 1846, and 16 above the average for the last 6 years. Scarlatina has prevailed to an alarming extent in this district, particularly during the month of September, and had a fatal termination in 12 cases.
SHEFFIELD	*Park*	The present number (74) is above the average. 35 were of persons above 30 years of age; being an unusually large proportion of adults.
———	*West*	The number of deaths (94), though only about the average for the September quarter, includes 9 cases of typhus; 3 of delirium tremens; 2 of variola; and a few of scarlatina and measles.
———	*North*	Deaths 236: 30 were from fever, principally typhus. The greater number of fever cases have taken place at the union workhouse, and the class of persons most affected appear to have been Irish labourers.
HUDDERSFIELD	*Lockwood*	The number of deaths (39) is about the average of the last five years. No disorder prevails at present, except diarrhœa, and this is mostly attributed to an insufficient supply of good fresh water.
———	*Slaithwaite*	The present number (36) is more than the average of deaths in the corresponding quarter of former years. We have not had any epidemic in the district. The increase is principally amongst children, 11 having died under three years of age; but the increase may in part be accounted for by the great number of railway labourers that are come into the district.
———	*Golcar*	The number of deaths (80) is above the average, and exceeds that of last quarter by 28, and of the corresponding quarter last year by 23. The increase may be attributed to the mortality amongst children, 24 having died of scarlatina.
HALIFAX	*Halifax*	Deaths 165: 20 were from fever, and 4 from diarrhœa.

SUP. REG. DISTRICT.	REG. DISTRICT	
HALIFAX	*Elland*	The deaths registered (56) are much less than in the two previous quarters, but considerably more than usual for the summer quarter, owing to the prevailing epidemic (scarlatina), the deaths from which have been 14.
———	*Southowram*	The number of deaths (36) is 6 above the corresponding quarter of last year. Typhus still prevails.
BRADFORD	*Cleckheaton*	Deaths 50: being 21 less than in the preceding quarter, and 16 more than in the corresponding quarter of last year. There have been 5 fatal cases of typhus.
———	*Pudsey*	Deaths 46: this district has been in a remarkable healthy state during the last quarter. The number of deaths is about one-third below the average. It is somewhat singular, that in one day (the 2nd of July) five deaths occurred, while afterwards, as the quarter advanced, not a death occurred in the district during 13 days.
———	*North Bierley*	Deaths 54; in the corresponding quarter last year, there were 48. This shews an increase, but that quarter was less than the average of four previous corresponding quarters by 16. This district, of which the inhabited houses are, according to the last enumeration, 1722, is in prosperous circumstances. There is one company which pays £3,000 or upwards every Saturday in wages. There are also four stuff manufactories and a small iron-work with three blast furnaces, so that during the late heavy calamity, we have in most cases, had enough and to spare. Such facts ought to be known. I believe that the want of labour, or of sufficient remuneration for it, made diseases so prevalent, and also so fatal.
LEEDS	*North*	Deaths 300: the same as in the corresponding quarter of last year. Typhus is not so prevalent or so fatal as during the preceding quarter. There are a few cases of small pox, chiefly amongst the Irish poor.
———	*South East*	The number of deaths registered this quarter (315), exhibits an excess of 55 over the corresponding quarter of last year, which is to be attributed to the number of deaths which have occurred in a fever hospital, which has been provided in this district for the reception of the sick and destitute Irish. The following are among the principal causes of death:—typhus 79; phthisis 28; diarrhœa 25; dysentery 13; convulsions 40; scarlatina 11; marasmus 17; hydrocephalus 12; tabes mesenterica 6; small pox 5; pneumonia 5; hooping cough 5; measles 5.
HUNSLET	*Hunslet*	Deaths 126: this is rather above the average. Typhus and scarlatina have prevailed and proved fatal in 27 cases.
KINGSTON-UPON-HULL	*St. Mary's*	Deaths 53: fever has been prevalent in this district during the last quarter. There were 10 fatal cases of scarlatina.
———	*Myton*	The number of deaths (261), although 36 below that of the corresponding quarter last year, presents, nevertheless, a very large increase on the general average. For although the number registered during the months of July and August did not exceed the usual average, yet the increase during September is unprecedented—117 deaths (about 40 above the monthly average of the last year) having occurred. More than half the number of deaths this quarter are those of children under 5 years of age, exceeding those of last quarter by 82. The chief causes of this large increase appear to be typhus among adults, and scarlatina among children—42 instances of the former and 24 of the latter having occurred. Both these disorders, especially the former, are still, and it is to be feared increasingly, prevalent.
YORK	*Walmgate*	The number of deaths has been very large (192), the average of the same quarter, for the last four years, being 99. The Union Fever Hospital, and the number of Irish residing in the district, partly account for the number of fever cases, there being 49, nearly all certified by the medical attendant. Scarlatina has also been very fatal during the last two months amongst children, and 40 deaths have been registered from this cause alone.
SUNDERLAND	*East*	The number of deaths (95) is above the average. The excess may be partly accounted for by an increase of population. The construction of wet docks in this town has increased the number of labourers, a large portion of whom reside in the district. Fever and diarrhœa have been very prevalent during the quarter: deaths from fever, 8—from diarrhœa, 11.
GATESHEAD	*Gateshead*	Deaths 155. This return is above the average. Fever has been prevalent. There were 11 deaths from typhus.
———	*Whickham*	Deaths 30. Small-pox is rather prevalent here at present; seven have died of this disease during the last three months.
NEWCASTLE-UPON-TYNE	*All Saints*	The present number (168) shews a small increase above the average. The increase arises from 31 deaths from typhus, principally among the Irish who have come hither during the summer; 8 from small-pox (all without vaccination), and 4 from measles.
———	*Byker*	Deaths 43. This district has been particularly healthy during the last quarter. The corresponding quarter of last year produced 112, and the following quarter 118.
COCKERMOUTH	*Cockermouth*	The number of deaths (70) is above the average. Scarlatina has been prevalent in this district.
———	*Maryport*	The number of deaths (106) is considerably above the average. 45 children have died of scarlatina, which still prevails in the district.
MERTHYR TYDFIL	*Merthyr Tydfil, Lower*	Deaths 148. There has been no disease calling for particular notice, except small-pox, of which there are 9 fatal cases. The deaths this quarter are 66 less than in the quarter ending 30th of June, 1847.
HOLYWELL	*Holywell*	Deaths 77: being above the average. 25 were caused by small-pox, about one-third of the total number.
———	*Flint*	Deaths 44. Small-pox has prevailed for the last quarter; there have been 9 fatal cases. 6 occurred from fever.

REMARKS ON THE WEATHER DURING THE QUARTER ENDING SEPTEMBER 30th, 1847.

By James Glaisher, Esq., of the Royal Observatory, Greenwich.

THE depression of temperature *below* the average which took place from the 7th of June to the end of the month, continued till the fourth of July. On July 5th a period of hot weather set in, and from this time to the end of the month, the average daily temperature was, with very slight exceptions, *above* that of the season; the period between the 11th and the 16th was the hottest during the year. The daily temperatures during the first and last weeks of August were *at* or *below* the average, and *above* the average during the remainder of the month. The month of September was cold, the temperature being, nearly every day throughout the month, *below* that of the season.

The mean temperature of July at Greenwich was 65°4, which is 0°9 *above* that of 1846; 5°6 *above* that of 1845; 4°0 *above* that of 1844; 4°5 *above* that of 1843; 5°2 *above* that of 1842; 7°6 *above* that of 1841; and 4°6 *above* the average of those six years.

The mean temperature of August at Greenwich was 62°1, which is 1°1 *above* the average for the six preceding years.

The mean temperature for September at Greenwich was 52°3, which is 3°1 *below* the average for the six preceding years. The low temperature for this month is very remarkable.

The mean temperature for the Quarter at Greenwich was 60°6, which is 1°9 *above* that for 1844; 3°7 *above* that for 1845; 2°0 *below* that for 1846; and 1°4 *above* the average for the Quarter for the six preceding years.

The mean temperature of Evaporation for the Quarter at Greenwich was 57°0, which is 2°1 *above* that for 1844; 2°7 *above* that for 1845; and 1°9 *below* that for 1846.

The mean temperature of the Dew Point for the Quarter was 54°1, which is 0°7 *above* that for 1844; 1°9 *above* that for 1845; 2°2 *below* that for 1846; and very nearly the same as the average for the six preceding years.

The mean weight of water in a cubic foot of Air for the Quarter was 4·8 grains, which is 0·1 grain less than the average for the preceding six years.

The additional weight of water required to saturate a cubic foot of Air was 1·1 grain, the average for the preceding six years was 1·0 grain.

The mean degree of humidity of the Atmosphere for the Quarter was 0·814, which is very nearly the average value as deduced from the six preceding years.

The mean elastic force of Vapour for the Quarter, was 0·429 inches, which is nearly the average for the six preceding years.

The average weight of a cubic foot of Air under the average temperature, humidity, and pressure, was 527 grains, and the average weight for the six preceding years was 526 grains.

The Rain fallen at Greenwich within the Quarter was 4·7 inches in depth; this quantity is about one half of the usual amount collected.

The horizontal movement of the Air was about 840 miles weekly, being somewhat less than the average amount.

The temperature of the Thames Water was 65°2 by day, and 62°9 by night. The water on an average was 3°5 warmer than the air.

The highest and lowest Readings of the Thermometer in Air at the height of four feet above the ground, and protected as much as possible from the effects of radiation and rain, were 86°0 and 33°5, as taken from the two-hourly observations; those readings, therefore, are not the true maximum and minimum readings, unless such happened at the times of observation.

The average daily range of the Readings of Thermometers in Air at the height of four feet, was 18°5, which is about 2° above the average amount.

In July the Reading of the Thermometer on grass was below 40° on five nights; the lowest reading was 36°5. In August it was below 40° on five nights, and the lowest reading was 32°. In September it was below 40° on seventeen nights, on ten of which it was below 32°, and the lowest reading was 24°.

The hot weather in July alluded to above, was general between the latitudes of 51° and 53°, except within a few miles of the southern coast. It does not seem to have extended beyond latitude 53°. The most intense heat seems to have been experienced at the inland parts of Sussex. From the subjoined tables, it appears the reading of the thermometer at Uckfield, attained the great height of 98°. This reading, I am inclined to think, was much above the true temperature of the air, and probably was caused by great reflexion of heat. In a letter addressed to me by Mr. Prince, he states that Uckfield is situated upon a light, very dry and sandy soil, and such as reflects heat freely. Mr. Prince has kindly furnished me with the maximum and minimum readings of his thermometer on every day in the month of July, and these were nearly identical with those I took myself, except on the 13th, 14th, and 15th, which readings were 95°, 98°, and 93° respectively. In consequence of these high readings Mr. Prince took additional observations, as follows:—

On July 11th, at 11^{h}. a.m. the reading of the thermometer was 84°.

On July 12th, at 9^{h}. a.m. the reading was 78°; at 4^{h}. p.m. it was 83°; and at 6^{h}. p m. it was 76°.

On July 13th, at 9^{h}. a.m. the reading was 80°; at 11^{h}. a.m. it was 93°; at 4^{h}. p.m. it was 91°; and at 6^{h}. p.m. it was 83°.

On July 14th, at 9^{h}. a.m. the reading was 80°; at 11^{h}. a.m. it was 88°; at 4^{h}. p.m. it was 86°; and at 6^{h}. p.m. it was 80°.

It seems, however, certain that the greatest degree of heat took place at the inland parts of Sussex.

This hot weather seems to have been very much modified in the counties of Cornwall and Devonshire, at Brighton, Liverpool, and Whitehaven, in fact every where in the vicinity of the sea.

The approximate mean monthly temperatures for other places besides Greenwich are shown in the subjoined table, and they differ but little in each month from those at Greenwich, at all places south of latitude 54°. The influence of height, however, is very strongly marked, in lowering the temperature, as at Beckington, in Somersetshire, whose height above the level of the sea is estimated at 265 feet; this influence is not shown at Hartwell, whose height above the sea is estimated at 300 feet; it is possible that the thermometers by which the latter observations have been made are somewhat in error, or the instruments may have been badly placed.

The monthly mean temperatures of those places in Cornwall and Devonshire in July was *below* that of the other places; in August was nearly the same; and in September was *above* those of other places.

The climate of Cornwall and Devonshire, as shown by these returns, is not only different from every other part of England, but is far from being the same in different parts of these counties. The average daily range of temperature, and extreme monthly range, are smaller than elsewhere, but different at the different stations. The average daily range of temperature for the two counties is 12°9; at Falmouth it is 9°5 only, which is 3°4 less than the mean for the two counties, or in other words, is one fourth part less; at Exeter the average daily range is 17°2, which is nearly the double of that at Falmouth. The mean temperature at Falmouth was no less than 3°8 *less* than that at Torquay; the average quarterly range of the reading of the thermometer shewing the temperature of the air for the two counties was 35°5; but that at Helston was 9°5 *larger*, and that at Falmouth was 7°5 *smaller* than the average. The highest reading in the quarter was at Helston, and the lowest was at Exeter, and these two extreme readings differed very much from the extreme readings at the other places. In fact, there seems to be several different climates in these counties, but all of them free from extreme and sudden changes of temperature.

On September 24th an aurora was seen at many places in the south of England, and particularly in Cornwall. During the whole of this day the magnetic instruments at Greenwich were very much disturbed. The several instruments changed their positions very frequently and to large amounts. At Greenwich several streamers of the aurora were seen.

QUARTERLY METEOROLOGICAL TABLE.

NAMES OF THE PLACES	Mean pressure of the Atmosphere of Dry Air reduced to the level of the Sea	Mean temperature of the Air	Highest reading of the Thermometer	Lowest reading of the Thermometer	Mean daily Range of Temperature	Range of the Thermometer	WIND		Mean amount of Cloud 0—10	RAIN		Mean weight of Vapour in a cubic foot of Air	Mean additional weight required to saturate a cubic foot of Air	Mean degree of humidity	Mean whole amount of Water in in a vertical column of Atmosphere	Mean weight of a cubic foot of Air.	Height of cistern of the Barometer above the level of the Sea.
							Mean estimated strength 0—6	General Direction		Number of days on which it fell	Amount collected						
	°	°	°	°	°	°					°	gr.	gr.		in.	grs.	feet
Helston	29·610	59·4	88·0	43·0	13·7	45·0	1·1	S.W.	4·7	28	5·2	5·0	0·7	0·867	6·6	528	106
Falmouth	.....	56·7	73·0	45·0	9·5	28.0	2·0	Variable	6·8	30	4·9						
Truro	.....	58·3	73·0	44 0	10·9	29·0	0·8	N.W.	6·0	24	5.2						
Torquay	29·659	60·5	80·0	44·0	13·2	36·0	2·1	N.E.	..	28	3·5	4·7	1·2	0·792	6·0	530	120
Exeter	.....	59·0	77·5	38·0	17·2	39·5	1·3	N.	6·7	34	3·0	4·9	0·8	0·806	6·4	528	
Brighton, Black Rock	29·633	57·7	76·0	42·0	6·8	34·0	..	Variable	4·9	24	..	4·9	1·2	0·846	6·4	530	60
Chichester	.....	57·7	82 0	37·0	15·6	45·0	..	S.W. & N.W.	..	..	3·1						
Uckfield	(29·720)	60·0	98 0	31 0	25·3	67·0	..	W.	..	25	3·1	4·9	1·0	0·821	6·1	526	180
Saffron Walden	.....	58.5	..	..	19·3	..	2·2	Variable	4·7	45	..	(5·9)					
Beckington, Somerset	.....	54·3	88·0	20·0	27·3	68·0	0.9	W.	..	..	..	4·7	0·4	0·890	6·0	529	265
Royal Observatory Greenwich	29·622	60·6	86·0	33·5	18·5	52·5	..	S.W.	6·4	34	4·7	4·9	1.1	0 814	6·0	527	150
Lewisham	.....	59·3	88·0	31·0	20·4	57·0	..	S.W.	5·7	..	4.3	4·9	0·9	0·820	6·2	....	40
Walworth, Surrey	29·510	59·8	88·0	38·0	16·5	50·0	3·4	S.W.	6·7	30	4·3	4·6	1·3	0·828	5·9	528	32
Pool Cottage, Hereford	.....	58·2	..	..	..	..	..	.....	..	26	4·3						
Cardington near Bedford	.....	58·7	82·0	34·0	13 5	48·0	..	.....	..	30	4·4						
Thwaite	.....	..	89·0	38 0	..	51·0	0·8	S.W.	..	25	4·5	....	....	.....	....	....	200
Cambridge Observatory	.....	59·2	86·8	29·9	22·3	56 9	1·0	W.S.W.	6·7	36	5·0	4·5	1·2	0·823	5·9	532	88
Norwich	29·574	58·8	83·0	39·0	14·7	44·0	..	S.W.	..	34	3·6	4·8	0·9	0 853	6·2	531	39
Hartwell, near Aylesbury	29·482	58·7	88·0	29·0	24·7	59·0	0·9	Variable	5·8	..	4·1	4·6	1·0	0·842	6·1	526	300
Derby	.....	56·8	80·0	31·0	17·9	49·0	..	W.	..	39	4·8	4·3	1·0	0·763	5·9	530	
Highfield House, Notts.	29·482	60·6	88·0	37·5	16·7	50·5	1·6	S.W.	5·3	32	4·3	4·8	1·2	0·811	5·9	524	204
Liverpool Observatory	29·626	59·1	76 8	44·5	9·9	32·3	1·1	N.W.	5·6	43	9·3	4·4	1·3	0·819	5·8	533	37
Whitehaven	.....	56·7	75·5	38 0	12·5	37·5	..	S.W.	..	46	9·0	4·4	1·4	0·826	5·7	531	
Durham	29·557	54·4	83·2	29·8	16·0	53·4	1·7	S.S.W. & N.N.W.	5·6	27	2·2	4·4	0·5	0·829	5·3	526	347
Newcastle	29·494	55·5	77·0	33·0	13·6	44·0	..	S.W.	..	28	4·7	4·9	0·3	0·943	6·4	529	121
No. of Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

From the numbers in the first column it appears that the volume of dry air was very nearly the same at all parts of the country; the differences between the numbers at different places are quite within the limits of the probable error of the Barometers, as so few have been compared with standards. The mean of all the results in the first column, except that of Uckfield, is 29·568 inches, and this may be considered as the pressure of dry air for England during the Quarter ending September 30, 1847.

From the numbers in the second column, we find for the Quarter ending September 30, 1847, that the mean temperature of the counties of Cornwall and Devonshire was 58°8, and for the remaining counties, excepting N. of latitude 54°, was 58°8, and that the mean temperature of Durham and Newcastle was 55°0.

The average daily range of the temperature in Cornwall and Devonshire was 12°9; at places near the sea, not including those in the above counties, it was 10°7; and the mean at all other places was 19°2. The daily range at Brighton is remarkably small; the next in order of magnitude are those of Liverpool, Newcastle, Cardington, &c. The greatest mean daily ranges were at Beckington, Uckfield, Hartwell and Cambridge.

The highest reading during the quarter was at Uckfield, which was 98°, and the lowest was at Beckington, which was 20°. The extreme range of temperature in England, during the quarter, was therefore 78°, or if we used the next highest reading, viz., that at Thwaite, the range would be 69°.

The average quarterly range of the Thermometer in Cornwall and Devonshire was 35°5; at Brighton, Liverpool, Whitehaven and Newcastle was 37°, and at the remaining places it was 53°7. The ranges at Beckington and Uckfield were the greatest.

The wind in the counties of Cornwall and Devonshire seems to have blown in a circle, for the direction of each place is different. The mean direction for all the remaining places is S.W., except at Liverpool where it was N.W., and at Durham where it was N.N.W.

From the numbers in the ninth column it would seem that the distribution of cloud has been nearly the same at all parts of the country, and such as to cover less than three-fifths of the whole sky.

The fall of rain has been the largest at Liverpool and Whitehaven, and it has fallen on a greater number of days at those places than at any others. The amount at other places is about one-half the usual fall in the quarter ending September 30. At Durham the fall has been the least in amount, and the next in order are those at Exeter, Chichester, Uckfield, &c.

Columns 12—16 contain the mean hygrometrical results, and those are nearly identical at all places, except at Saffron Walden; at this place the average weight of water in a cubic foot of air is stated to be 5·9 grains, but at the mean temperature of 58°5, the greatest possible quantity, if the air had been always saturated, is 5·7 grains, so that it is evident that either the instruments are bad, or they have been badly placed.

The mean weight of vapour in a cubic foot of air for England (excepting Cornwall and Devonshire) in the quarter ending Sept. 30,	was	4·8 grains
The mean additional weight required to saturate a cubic foot of air	do	was 1·0 grain
The mean degree of humidity	do	was 0·835 grains
The mean amount of vapour mixed with the air would have produced water, if all had been precipitated at one time on the surface of the earth, to the depth of	do	6 inches
The mean weight of air under its average heat, humidity and pressure	do	was 527 grains

And those values for Cornwall and Devonshire were 4·9 grains; 0·9 grains; 0·822 grains; 6·3 inches and 529 grains respectively.

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING SEPTEMBER 30.

Compiled from Observations furnished by the Gentlemen whose names are mentioned in the first column, the Hygrometrical results having been deduced from Glaisher's Hygrometrical Tables.

	Year 1847 Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	THERMOMETERS: Wet Bulb — Mean of daily Observations	THERMOMETERS: Temperature of the Dew Point — Deduced	THERMOMETERS: Temperature of the Dew Point — Observed	THERMOMETERS: Self-registering — Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Average daily range of the Thermometer readings	Range of the Thermometer in the month	WIND — Average strength 0—6	WIND — General Direction	Amount of Clouds 0—10	RAIN — Number of days on which it fell	RAIN — Amount in inches	Deductions relative to the Humidity of the Atmosphere — Mean weight of Vapour in a cubic foot of Air	Deductions relative to the Humidity of the Atmosphere — Mean additional weight of Vapour required to saturate a cubic foot of Air	Deductions relative to the Humidity of the Atmosphere — Mean degree of Humidity	Deductions relative to the Humidity of the Atmosphere — Mean quantity of Water in a vertical column of Atmosphere	Deductions relative to the Humidity of the Atmosphere — Weight of a cubic foot of Air	Height of the station above the Sea in feet	Daily Observations taken at	REMARKS
		° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		in.	gr.			
HELSTON,	July	50·7	5·18 W.	29·946	0·527	29·419	66·0	62·6	60·2	....	88·0	52·0	72·0	56·2	64·0	15·8	36·0	0·9	N. & N.W.	4·4	7	1·6	5·8	1·3	0·823	7·3	521	106	9 A.M.	
M. P. Moyle, Esq.	Aug.	....	....	29·977	0·480	29·497	63·7	60·2	57·4	....	77·0	43·0	68·8	55·0	61·9	13·8	34·0	1·0	N. & S.W.	4·6	10	1·2	5·3	1·3	0·811	6·7	525	....	3 P.M.	
	Sep.	....	....	29·951	0·416	29·535	57·9	55·3	53·2	....	67·0	45·0	62·6	51·2	56·9	11·4	22·0	1·3	S.W.	5·6	11	2·4	4·7	0·8	0·854	5·8	531	....	9 P.M.	
FALMOUTH,	July	50·8	5·2 W.	30·04	....	....	62·7	....	....	....	73·0	52·0	67·5	56·1	61·8	11·4	21 0	2	E. & N.W.	6·2	7	1·4	....	....	....	....	....	....	9 P.M.	
Lovell Squire, Esq.	Aug.	....	....	30·01	....	....	59·6	....	....	....	71·0	45·0	62·1	54·2	58·1	7·9	26·0	2	N. & W.	7·1	9	1·3	....	....	....	....	....	....	.....	
	Sep.	....	....	29·99	....	....	55·0	....	....	....	64·0	45·0	59·3	50·2	54·8	9·1	19·0	2	W. S.W.	7·0	14	2·2	....	....	....	....	....	....	.....	
TRURO,	July	50·17	5·4 W.	30·137	....	....	....	....	....	....	73·0	51·0	67·8	57·1	62·4	10·7	22·0	0·5	N.	5·8	4	1·8	....	....	....	....	....	....	9 A.M.	Evaporation— sun in. | shade in.
Dr. C. Barham.	Aug.	....	....	30·121	....	....	....	....	....	....	72·0	45·0	66·4	55·4	60·6	11·0	27·0	0·8	N.W.	5·7	10	1·4	....	....	....	....	....	....	.....	„ 4·9 | „ 3·5
	Sep.	....	....	30·096	....	....	....	....	....	....	64·0	44·0	62·3	51·3	56·5	11·0	20·0	1·2	N.W. & S.W.	6·5	10	2·0	....	....	....	....	....	....	.....	„ 5·4 | „ 3·0
																														„ 4·9 | „ 3·0
TORQUAY.	July	„	„	29·931	0·470	29·461	65·6	60·1	56·3	....	80·0	51·0	72·8	57·3	65·0	15·5	29·0	1·8	N.E.	..	9	1·5	5·2	1·6	0·761	6 5	524	120	9 A.M.	
Edward Vivian, Esq.	Aug.	....	....	29·941	0·461	29·480	63·2	59·2	56·3	....	75·0	46·0	69·1	56·3	62·7	12·8	29·0	2·1	N.E.	..	11	1·0	5·1	1·3	0·797	6·4	526	....	.....	
	Sep.	....	....	29·962	0·357	29·605	57·9	53·4	50·2	....	68·0	44·0	63·0	51·8	57·4	11·2	24·0	2·4	S.W.	..	8	1·0	4·0	1·5	0·740	5·0	532	....	.....	
EXETER,	July	50·44	3·33 W.	29·94	0·520	29·420	66 6	62·4	59·9	57·0	77·0	47·0	73·2	54·5	63·9	18·7	30·0	1·5	S.E. & N.	4·0	9	1·8	5·8	1·4	0·808	7·2	523	....	9 A.M.	
Dr. Shapter.	Aug.	....	....	29·87	0·446	29·424	64·8	59·0	55·4	54·4	77·5	43·3	71·1	53·7	62·4	17·4	34·3	1·5	N.	8·0	12	0·3	5·0	1·6	0·734	6·9	523	....	.....	
	Sep.	....	....	29·85	0·362	29.488	57·5	53·0	49·1	49·8	69·5	38·0	63·2	47·8	55·5	15·4	31·5	1 0	N. & W.	8·0	13	0·9	4·1	1·2	0·756	5·0	529	....	.....	
BRIGHTON, BLACK ROCK,	July	50·50	0·9 W.	30·064	0·607	29·457	66·6	65·3	64·4	....	76·0	49·0	71·2	56·2	63·7	6·6	27·0	....	N.E. & S.W.	4·0	3	..	6 7	0 5	0·965	8·4	522	60	9 A.M.	
J. O. N. Rutter, Esq.	Aug.	....	....	29·998	0·478	29·520	63·8	59·9	56·8	....	75·0	49·0	68·2	54·4	61·3	6·2	26·0	....	S.E. & S.W.	5·4	11	..	5·3	1·3	0·810	6·6	526	....	3 P.M.	
	Sep.	....	....	30·010	0·303	29·708	54·2	48·9	43·9	....	67·0	42·0	59·6	45·5	52·6	7·6	25·0	....	S.W. & N.E.	5·3	10	..	3·4	1·5	0·701	4·2	536	....	9 P.M.	
CHICHESTER,	July	50·50	0·46 W.	30·105	....	....	....	....	....	....	82·0	49·0	71·9	55·8	63·9	16·1	32·0	....	S.W. & N.W.	..	....	0·7	....	....	....	....	....	....	9 A.M.	
Wm. Hills, Esq., Curator of Philosophical Institution.	Aug.	....	....	30·048	....	....	....	....	....	....	79·0	47·0	68·1	53·8	60·9	14·3	32·0	....	N.W.	..	....	1·3	....	....	....	....	....	....	and	
	Sep.	....	....	30·013	....	....	....	....	....	....	66·0	37·0	61·3	44·9	53·1	16·4	29·0	....	S.W. & N.W.	..	....	1·1	....	....	....	....	....	....	9 P.M.	
UCKFIELD,	July	50·59	0·5 E.	30·000	0·521	29·479	69·6	63·1	59·7	59·6	98·0	43·0	80·7	53·1	66·9	27·6	55·0	....	W.	..	4	0·2	5·8	2·2	0·753	7·2	519	180	9 A.M.	Evaporation—
C. L. Prince, Esq., Surgeon.	Aug.	....	....	29·945	0·463	29·482	65·3	59·8	56·3	56·4	87·5	39·0	75·9	51·3	63·6	24·6	48·5	....	N.E.	..	10	1·1	5·1	1·7	0·746	6·4	524	....	9 P.M.	4·6 inches
	Sep.	....	....	29·920	0·334	29·586	56·1	51.2	46·7	48 4	75·0	31·0	66·0	42·4	54·2	23 6	44·0	....	W.	..	11	1·8	3·8	1·4	0·726	4·6	534	....	.....	4·4 2·9
SAFFRON WALDEN,	July	52·2	0·15 E.	„	0·628	....	73·0	68·0	....	....	85 0	46·0	75·0	54·0	65·0	21·0	39·0	1·5	N.E.	4·7	10	..	6·9	1·9	0·784	8·7	515	....	9 A.M.	
T. Spurgin, Esq.	Aug.	....	....	....	0·654	....	69·0	64·0	....	....	....	....	71·0	51·0	61·0	20·0	....	2 7	N.	4·5	14	2·0	6·1	1·7	0·780	7·6	516	....	9 P.M.	
	Sep.	....	....	....	0·421	....	59·0	56·0	....	....	....	....	62·0	45·0	54·0	17·0	....	2·5	W.	4·9	21	1·6	4·7	1·0	0·833	5·8	522	....	.....	
BECKINGTON,	July	51·24	2·22 W.	29·87	0·506	29·364	64·8	61·3	58·9	....	88·0	37·0	76·9	47·0	61·0	29·9	51·0	0·4	W.	4·7	4	1·2	5.6	1·0	0·830	6·9	522	265	9 A.M.	
Rev. C. Blathwayt, A.M.	Aug.	....	....	29·89	0·426	29·464	60·1	56·8	51 1	....	83·0	26·0	67·5	42·6	56·8	24·9	57·0	0·5	N.E. & S.W.	5·5	11	1·3	4·8	1·0	0·821	5·3	528	....	3 P.M.	
	Sep.	....	....	29·80	0·384	29·416	54·1	52·6	51·1	....	70·0	20·0	62 6	35·5	49·8	27·1	50·0	1·7	W.	5 2	11	2·2	4·4	0.5	0·905	5·3	532	....	9 P.M.	

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING SEPTEMBER 30,—(*continued.*)

	Year 1847 / Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Average daily range of the Thermometer readings	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	Deductions relative to the Humidity of the Atmosphere: Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	Height of the Station above the Sea in feet	Daily Observations taken at	REMARKS
		° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°							in.	gr.	gr.		gr.	gr.			
GREENWICH OBSERVATORY.	July	51·31	0·0	29·924	0·467	29·457	65·4	60·0	56·4	....	86·0	47·5	....	....	....	....	....	....	S.W.	5·7	7	0·9	5·2	1·7	0·747	6·5	522	150	Every two hours	
The Astronomer Royal.	Aug.	....	....	29·876	0·470	29·406	62·1	59·3	56·1	....	84·4	43·9	....	....	....	....	....	....	S.W.W.	6·6	12	2·3	5·3	1·0	0·851	6·5	524	....		
	Sep.	....	....	29·825	0·362	29·463	54·3	51·7	49·7	....	70·7	53·5	....	....	....	....	....	....	S.W.	6·8	15	1·5	4·1	0·8	0·843	5·0	534	....		
LEWISHAM,	July	51·31	....	....	0·504	....	68·5	62·6	59 5	....	88·0	45·0	76·3	55·3	65·8	21·0	43·0	....	S.W.	5·0	....	..	5·7	1·9	0·742	6·9	....	40	4, 8	
James Glaisher, Esq.	Aug.	....	....	....	0·476	....	63·9	59·9	57·2	....	87·3	40·7	72·9	52·4	62·6	20·5	46 6	....	S.W.	6·0	....	..	5·3	1·3	0·798	6·6	....	....	20	
	Sep	....	....	....	0 356	....	54·9	51·8	48·7	....	70·5	31·0	63·7	44·1	53·9	19·6	39·5	....	S.W.	6·0	....	..	4·0	1·1	0 807	5·0	....	....	Gott.time	
WALWORTH,	July	51·31	0·6 W.	29 934	0·509	29·425	65·0	61·5	59·9	....	88·0	52·0	75·5	56·0	65·8	19·5	26·0	2·9	S.E. & S W.	5·6	6	1·1	5·6	1·2	0·836	6·9	523	32	9 A.M.	The Barometer reading in August was returned as 29·803, it is altered conjecturally to 29·903.
W. H White, Esq.	Aug.	....	....	29·903	0·395	29 508	63·1	56·3	51 5	....	83·0	48·0	71·7	55·6	63·7	16·1	35·0	2·8	N. & S.W.	8·2	11	1·9	4·4	2·3	0·683	5·5	522	....	3 P.M.	
	Sep.	....	....	29 856	0 368	29·488	54·4	51·8	49·6	....	71·0	38·0	61·5	47·5	54·5	14·0	33·0	4·5	N. & S.W.	6·3	13	1·3	4·2	0·8	0·871	5·2	533	....	9 P.M.	
HARTWELL, near AYLESBURY,	July	51·49	0·43 W.	29 781	0·493	29·289	68·0	61·7	57·8	....	88·0	44·0	78·0	53·8	65·9	24·2	44·0	0·2	E.S.E.	5·2	....	1·3	5·4	2.2	0·717	6·8	518	....	9 A.M. and 5 P.M.	
Mr. Horton, Assistant to Dr. Lee.	Aug.	....	....	29·658	0·454	29·204	62·2	58·4	55·7	....	88·0	30·0	74·3	47·2	60·7	27·1	58·0	1·2	W. & N.E.	6·4	....	1·2	5·1	1·2	0·781	6·2	520	....		
	Sep.	....	....	29 593	0·373	29 220	56·2	52·3	49·0	....	79·0	29·0	65.3	42·5	54·2	22·8	50·0	1·3	W. & N.W.	5·7	....	1·6	4·1	1·1	0·793	5·2	526	300	.....	
POOL COTTAGE, HEREFORD	July	52·4	2·34 W.	29·68	....	....	70·0	....	....	....	....	....	....	....	....	....	....	....	N.E. & S.W.	..	4	0.8	....	....	....	....	....	....	NOON	
J. Pendergrass, Esq.	Aug.	....	....	29·62	....	....	67 0	....	....	....	....	....	....	....	....	....	....	....	W. & N.E.	..	8	1·5	....	....	....	....	....	....	.....	
	Sep.	....	....	29·49	....	....	57·5	....	....	....	....	....	....	....	....	....	....	....	W. & S.W.	..	14	2·0	....	....	....	....	....	....	.....	
CAMBRIDGE OBSERVATORY.	July	52·13	0·6 E.	30·202	0·506	29·696	68·9	62·4	59·0	....	86·7	45·9	77·6	53·9	65·7	23·7	40.8	0·2	N.	7·0	8	1·0	5·5	2·2	0·714	6·9	523	88	9 A.M. 3 P.M.	These Barometer readings seem to be too high by at least 0·1. in.
John H. Morgan, Esq.	Aug.	....	....	30 126	0·438	29·688	65·3	58.6	54·4	....	86·8	40·7	74·7	49·7	61·2	23·0	46·1	1·3	W.S W.	6·7	12	2·3	4·8	2·1	0·796	6 0	526	....	.....	
	Sep.	....	....	30·038	0·337	29·701	56·6	51·6	47·1	....	73·0	29·9	63·8	43·6	53·7	20·2	43·1	1·6	W.S.W.	6·5	16	1·7	3·8	1·4	0·722	4·7	534	....	.....	
THWAITE.	July	52·8	1·16 E.	....	....	....	....	....	....	....	89 0	48·0	....	....	....	....	41·0	0·3	S.W.	..	5	1·0	....	....	....	....	....	....	200	.....	
Orlando Whistlecraft, Esq.	Aug.	....	....	....	....	....	....	....	....	....	89 0	45·0	....	....	....	....	44·0	0·5	N.E. & S.W.	..	10	1·7	....	....	....	....	....	....	.....	
	Sep.	....	....	....	....	....	....	....	....	....	71·0	38·0	....	....	....	....	33 0	1·7	W.	..	10	1·8	....	....	....	....	....	....	.....	
CARDINGTON, near BEDFORD,	July	52·7	0·25 W.	30·01	....	....	....	....	....	....	82·0	49·0	74·0	55·6	64·8	18·4	33·0	....	.....	..	5	1·2	....	....	....	....	....	....	....	2 P.M.	
Mr. Maclaren, Gardener to S. C. Whitbread, Esq.	Aug.	....	....	29 99	....	....	....	....	....	....	78 0	42·0	69·3	55·8	62·5	13·5	36·0	....	.....	..	14	1·6	....	....	....	....	....	....	....	.....	
	Sep.	....	....	29·92	....	....	....	....	....	....	67·0	34·0	57·6	49·1	53·3	8·5	33·0	....	.....	..	11	1·6	....	....	....	....	....	....	....	.....	
NORWICH.	July	52·40	1·18 E.	30·032	0·504	29·528	67·8	62 3	59·0	....	83·0	54 0	73·3	56·5	64·9	16·8	29·0	....	S. & S.W.	..	7	0·5	5·6	1·9	0·747	6·9	522	39	Bar. 10 A.M. and 2 P.M.	
William Brooke, Esq.	Aug.	....	....	29 984	0·488	29·496	64·9	60·6	57·9	....	82·0	47·0	70·0	54·0	62·0	16·0	35·0	....	S.W.	..	13	1·5	5·4	1·4	0·793	6·8	524	....	Therm. 9 and 3 6 and 9	
	Sep.	....	....	29·866	0·349	29·517	55·6	51·7	49·1	....	69·0	39·0	59·9	48·5	54·2	11·4	30·0	....	W. & S.W.	..	14	1·6	4·0	1·1	0·782	4·9	531	....		Evaporation in September, 1·095 inches.
DERBY,	July	52·55	1·28 W.	29·87	0·511	29 359	72·2	63·6	59·3	....	80·0	45·0	73·4	51·5	63·9	18·9	35·0	....	W.	..	6	1·1	5·6	3·0	0·655	7·0	514	....	3 P.M.	
Mr. J. Davis, Optician.	Aug.	....	....	29 81	0·433	29·377	67·2	59·0	54·4	....	80·0	38·0	68·5	49·7	59·1	18·8	42·0	....	W. & N.W.	..	13	1 4	4·8	2·5	0·652	6·0	518	....	.....	
	Sep.	....	....	29·72	0·296	29·424	58·6	50·3	43·2	....	71·0	31·0	60·1	44·1	52·1	16·0	40·0	....	W. & N.W	..	10	2·3	3·3	2·3	0·600	4·1	526	....	.....	

MONTHLY METEOROLOGICAL TABLE, FOR THE QUARTER ENDING SEPTEMBER 30,—(*continued.*)

Year 1847 / Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Mean of daily Observations (Dry Bulb)	Mean of daily Observations (Wet Bulb)	Temperature of the Dew Point: Deduced	Temperature of the Dew Point: Observed	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Average daily range of the Thermometer readings	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	Deductions relative to the Humidity of the Atmosphere: Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	Height of the station above the Sea in feet	Daily Observations taken at	REMARKS
	′ °	′ °	in.	in.	in.	°	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		in.	gr.			
HIGHFIELD HOUSE, NOTTS,	July	52·58	1·10 w.	29·854	0·521	29·330	66·8	62·5	60·0	....	88·0	51·0	78·2	59·3	68·8	18·9	37 0	1·0	E.	5·2	7	0·7	5·8	1·3	0·803	7·2	520	204	Every	
Edward Joseph Lowe, Esq.	Aug.	....	....	29·873	0·128	29·445	59·8	56·6	54·1	....	85·1	14·5	71·7	54·4	63·1	17·3	40·6	2·3	S.W. & W.	1·9	10	1·4	4·8	0·9	0·816	5·9	528	....	3 hours	
	Sep.	....	....	29·846	0·337	29·509	52·9	50·1	47·0	....	72·8	37·5	61·2	17·4	54·3	13·8	35·3	1·6	W. & S.W.	5·9	15	2·2	3·8	0 9	0·813	4·7	535	....	nearly	
																												h. m.	
LIVERPOOL OBSERVATORY	July	53·25	3·0 w.	30·036	0·480	29·556	68·9	61·7	57·4	....	76·8	53·3	71·4	60·0	65·7	11·4	23 5	0·7	N.W.	1·8	8	1·7	5·3	2·4	0·685	6·6	520	37	1·8 P.M	
John Hartnup, Esq.	Aug.	....	....	29 993	0·130	29·563	63·7	57·9	53·8	....	72·3	50·0	66·1	56·3	61·2	9·8	22·3	1·2	N.W.	6·5	19	3·0	4·7	1·9	0·720	5·9	525	....	.....	
	Sep.	....	....	29·903	0·351	29·552	57·0	51·8	18·2	....	65·5	44·5	59 2	50·6	54·9	8·6	21·0	1·3	N.W. & W.	5·6	16	4·6	4·0	1·4	0·741	4·9	532	....	.....	
WHITEHAVEN	July	....	....	29·918	0·478	29·440	66·2	60·7	57·4	57·4	75·5	50·5	70·4	56·0	63·2	14·4	25·0	....	S.W. & N.W.	..	8	0·8	5·3	1·8	0·742	6·6	522	....	10 A.M.	Evaporation— 4·7 in.
John Fletcher Miller, Esq.	Aug.	....	....	29·855	0·125	29·430	62·1	57·2	53·8	53·8	72·0	42·0	65·2	52·3	58·8	12·9	30·0	....	W.	..	18	4·5	4·7	1·6	0·753	5·9	526	....	3 P.M.	3·8
	Sep.	....	....	29·738	0·346	29·392	55·6	51·0	46·7	47·2	62·5	38·0	58·3	47·9	53·1	10·4	24·5	....	S.W. & N.W.	..	20	3·7	3·8	1·2	0·744	4·6	531	....	.....	2·8
DURHAM,	July	54·47	1·34w.	29·679	0·412	29·239	61·1	57·7	52·9	....	83·2	42·0	70·0	52·9	61·5	17·1	41·2	1·3	S.S.W. & N.N.W.	5·8	7	1·1	5·0	1·1	0·820	6·0	524	347	9 A.M.	
Rev. R. A. Thompson.	Aug.	....	....	29·623	0·390	29·233	57·0	53·8	51 4	...	74·5	34·0	64·6	48·4	56·5	16·2	40·5	1·7	,,	5·7	10	0·6	4·4	0·9	0·816	5·5	525	....	9 P.M.	
	Sep.	....	....	29·475	0·320	29·155	55 0	48·0	45·6	....	67·8	29·8	58·1	43·3	50·7	14·8	38·0	2·1	,,	5·4	10	0·5	3·7	0·6	0·867	4·5	531	....	.....	
NEWCASTLE-UPON-TYNE,	July	54·58	1·37w.	29·906	0·534	29·372	63·8	61·8	60·6	....	77·0	47·0	68·5	55·6	62·0	12·9	30·0	....	S.W.	..	6	1·7	5·9	0 7	0·893	7·3	523	121	.....	
G. Muras, Esq.	Aug.	....	....	29·819	0·474	29·380	60·1	58·3	57·0	....	76 5	38·0	64·7	50·5	57·6	14 2	38·5	....	S.W. & N.E.	..	9	1·7	5·3	0·7	0·896	6·5	525	....	.....	
	Sep.	....	....	29·720	0·383	29·337	53·1	51·9	49 9	....	65·0	33·0	58·5	44·8	51·7	13·7	32·0	....	S.W.	..	13	1·3	4·4	0·3	0·927	5·3	533	....	.....	

At Helston, the instruments were made by Mr. Moyle himself, and with great care; the barometer is a standard, and was filled in vacuo; it has a ring of platina foil around the open end; the cistern is of glass; and the true adjustment of the ivory point of the scale can be made at sight.

The barometer at Truro was made by Gilbert Ton; at Torquay, by Carsatelli; at Uckfield, by Ronchetti; at Beckington, by Abraham of Bath; at Greenwich, by Newman; at Walworth, by Casella; at Cardington, by Harris, Holborn; at Cambridge, by Dolland; at Norwich, by Newman; at Derby, by Mr. Davis himself; at Highfield House, by Pasterelli; at Liverpool, by Adie, of Liverpool; at Durham, by Hermann, à Paris, (a new tube has, however, been fitted by Adie, of Edinburgh); and at Newcastle, by Newman. I do not know by whom the other instruments were made.

Of these instruments, those at Greenwich, Walworth, Cambridge, and Liverpool, have been compared either directly or indirectly with the Royal Society's standard barometer, at Somerset House; and none others have been so compared. The dry and wet bulb thermometers were made at Torquay by Mr. Vivian himself; at Uckfield, by Watkins and Hill; at Beckington, by Abraham, of Bath; at Greenwich, by Newman; at Walworth, by Casella; at Cambridge, by Bennett, 65, Cheapside; at Norwich, by Barrow; at Derby, by Mr. Davis himself; at Highfield House, by Carey and Ronchetti; at Liverpool, by Adie, of Liverpool; at Whitehaven, by Barrow; at Durham, by Adie, of Edinburgh; and at Newcastle, by Newman. I do not know by whom those at the other stations were made. Of these instruments, those at Greenwich, Lewisham, Whitehaven, and Norwich, have been compared with standards. Those at Torquay have been compared with a pair which had been compared with a standard by Mr. Glaisher, and they have been found to be correct within a small fraction of a degree.

The heading of each column of the preceding table sufficiently explains itself, except that of the degree of humidity. This is expressed in the natural scale in which air at its greatest humidity (that is, when it is saturated with vapour,) is considered as unity; and air deprived of all moisture is considered as Zero, the intermediate degrees being proportional. Therefore, that which constitutes the measure of humidity of the air, is the proportion of moisture *it does* contain to what *it would* contain if saturated: thus, if air at any temperature whatever, contains vapour of half the tension which it would do if saturated, the degree is 0·5; if three-fourths, it is 0·75, and so on.

The reduction of the preceding results has been made as follows:—The first process was the application of corrections depending on the time or times of each day at which the observations had been made, to deduce from their monthly values, the true mean monthly values, for the barometer, thermometer, and each hygrometrical result. The next process was the taking of the reduced monthly mean "elastic force of vapour" from the reduced "barometer readings." The third step was the taking of the quarterly mean of these monthly values, and reducing that for the barometer to the level of the sea, and in this way the following Quarterly Table was formed.

QUARTERLY METEOROLOGICAL TABLE,

Compiled from the Weekly Tables furnished to the Registrar General by the Astronomer Royal.

Deaths registered in London from Small Pox, Measles, Scarlatina, Hooping Cough, Typhus, Diarrhœa, Dysentery and Cholera, Influenza, Consumption, and other diseases of the Lungs; the numbers at each age, and the total deaths † (except violent and sudden) in each of the 13 weeks ending September 25, 1847.*

1847 Week ending	Phases of the Moon	Mean height of the Barometer, from 12 daily observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS: Highest during the week	Lowest during the week	Mean: Of the Highest on each day, from 6 observations	Mean: Of the Lowest on each day, from 6 observations	Mean: Difference in degrees	Mean of 72 observations weekly	Dew Point: Mean of 72 results	Self-Registering: Highest in the sun: During the week	Highest in the sun: Mean of 7 observations	Lowest on the grass: During the week	Lowest on the grass: Mean of 7 observations	In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'Clock. MEAN. Of the highest on each day from 7 observations.	In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'Clock. MEAN. Of the lowest on each day from 7 observations.	Difference between the dew point temperature and air temperature: Mean of 72 differences	Mean of the greatest on each day, 6 observations	Mean of the least on each day, 6 observations	Difference between the mean temperature of the week, and the mean temperature of the same week on an average of 25 years	WIND: Pressure in lbs. on the square foot: General direction	Greatest pressure in the week	Mean for the week	The amount of Horizontal movement of the air in each week	Mean amount of Cloud, 0-10	Rain in inches (7 days)
		inches	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o				miles		
July 3rd	Full, June 28th	30.112	76.7	51.3	71.6	54.2	17.4	61.3	54.1	100.0	91.0	44.0	46.9	66.2	62.2	7.1	14.1	2.3	—0.3	N.E.	3.0	0.1	980	7.8	0.02
,, 10th	Last qr., July 5th	29.820	84.0	49.0	77.0	55.2	21.8	65.5	57.3	106.4	94.6	36.5	47.0	69.6	65.3	8.1	17.9	0.8	+2.9	S.W.	3.5	0.0	830	5.2	0.40
,, 17th	New, ,, 12th	29 990	86.0	58.5	82.0	60.0	22.0	70.2	61.3	108.5	97.7	46.2	51.6	73.2	68.6	8.8	20.5	1.1	+6.8	W. S.W. and Calm	1.8	0.0	455	5.9	0.41
,, 24th	1st qr., ,, 20th	29.890	76.5	47.5	72.6	53.3	19.3	63.1	54.1	94.4	86.1	37.2	44.4	71.4	67.4	9.0	18.3	1.5	+6.8	Variable	3.0	0.0	550	6.9	0.02
,, 31st	Full, ,, 27th	29.916	81.7	49.1	77.8	54.8	23.0	65.9	55.0	100.4	94.6	36.5	43.6	69.8	66.2	10.9	21.3	1.9	+3.1	Variable	1.5	0.0	610	4.8	0.00
Aug. 7th	Last qr., Aug. 3rd	29.651	81.4	43.9	73.1	51.9	21.2	62.6	53.6	106.0	93.3	32.2	42.9	71.3	66.7	9.0	18.3	1.6	—0.4	Variable	3.7	0.1	800	6.2	1.03
,, 14th	New, ,, 11th	29.939	82.0	49.4	73.9	53.7	20.2	63.2	56.8	100.5	92.0	35.0	43.3	66.3	61.3	6.4	14.2	0.4	+0.5	S.W.	2.5	0.1	925	6.5	0.47
,, 21st	1st qr. ,, 19th	29.906	78.2	52.8	71.2	58.7	12.5	64.1	61.5	96.2	85.5	43.0	53.3	65.1	65.0	2.5	6.6	0.1	+2.2	Calm	2.0	0.0	625	7.7	0.62
,, 28th	Full, ,, 26th	30.010	76.0	48.0	70.2	50.8	19.4	60.3	53.8	98.5	88.1	36.5	43.7	63.0	62.2	6.5	12.5	1.7	—0.6	Variable	4.0	0.1	590	7.9	0.13
Sept. 4th	Lastqr., Sept. 1st	29.775	66.4	43.0	61.8	46.5	15.3	54.3	49.3	89.7	78.5	29.5	35.9	61.5	60.9	5.0	10.0	1.4	—5.1	W.	5.0	0.2	1100	6.3	0.09
,, 11th	New, ,, 9th	29.871	70.7	39.0	66.2	47.2	19.0	56.3	51.4	88.5	82.2	30.0	37.7	57.6	57.0	4.9	10.4	0.8	—2.1	W.S.W.	1.3	0.0	720	5.8	0.19
,, 18th	1st qr., ,, 17th	29.542	64.0	43.0	61.1	47.9	13.2	54.1	50.9	81.0	75.6	31.0	40.9	57.4	56.8	3.2	6.3	0.5	—4.0	W.S.W.	12.0	0.8	1505	7.5	0.53
,, 25th	Full, ,, 24th	29.901	67.4	43.2	63.1	48.8	14.3	56.1	51.7	79.6	75.2	33.0	42.1	55.5	55.2	4.4	9.8	0.7	+0.4	S.W.	5.0	0.3	1200	7.9	0.70
Mean, Highest, or Lowest, of the 13 weeks.		29.871	86.0	39.0	70.9	52.5	18.4	61.3	54.7	108.5	87.3	30.0	44.1	65.2	62.9	6.6	13.9	1.1	+0.3		12.0	0.1	838	6.6	4.61

Small Pox	Measles	Scarlatina	Hooping Cough	Typhus	Diarrhœa, Dysentery, and Cholera	Influenza	Phthisis or Consumption	Other diseases of the lungs	* Deaths at Three Ages, (exclusive of violent and sudden Deaths): 0 to 15	15 to 60	60 and upwards	Deaths from all causes, (exclusive of violent and sudden deaths)
28	26	16	23	61	17	1	147	92	344	324	167	835
32	44	13	18	52	38	—	114	81	414	271	171	857
28	26	15	18	64	47	2	148	97	425	321	175	921
25	34	18	15	57	67	—	120	82	433	271	165	871
25	44	16	16	54	125	1	125	71	505	268	153	926
16	46	16	17	55	128	—	118	67	523	276	140	940
26	54	16	9	70	188	—	120	85	588	277	203	1070
24	44	29	21	62	172	—	102	82	556	293	194	1043
25	47	21	23	74	157	—	120	75	537	309	207	1054
25	40	29	15	77	135	1	124	78	503	323	176	1002
14	37	49	19	81	139	—	108	67	536	297	161	998
25	44	32	27	111	117	1	127	94	531	387	190	1109
27	35	46	17	77	107	—	108	100	511	319	180	1010
320	521	316	238	895	1437	6	1581	1071	6106	3936	2282	12636

* The ages of 12 were not specified in the Returns.

† Deaths enumerated under the heads "violent" and "sudden," chiefly consist of cases returned by the Coroner, many of which are registered, not when they occur, but at uncertain periods; and they are therefore excluded from this comparison of weeks.

RETURN

OF THE

Mortality in 117 Districts of England,

For the Quarter ending December 31st, 1847.

NNUAL SERIES VI.] PUBLISHED BY AUTHORITY OF THE REGISTRAR GENERAL. [1847.—No. 4.

STATE OF THE PUBLIC HEALTH IN THE LAST QUARTER OF THE YEAR 1847.

"The Quarterly Returns are obtained from 117 Districts, sub-divided into 582 Sub-Districts. *Thirty-six* Districts are in the Metropolis, and the remaining 81 comprise, with some agricultural Districts, the principal towns and cities of England. The population was 6612800 in 1841."

57925 deaths were registered in the last quarter. The average number of deaths deduced from the returns of the corresponding quarter of nine preceding years, and corrected for increase of population is 46549. There is consequently an excess of 11376 deaths in the quarter. The deaths registered in the December quarters of 1845, 1846, and 1847, are 39291, 53093, 57925; the mortality in the first, is to that of the last quarter, nearly as 2 to 3. The mortality, it will be seen in the subjoined table, was below the average in the autumn quarters of the 5 years, 1841—5, and above the average in the 5 years 1838—40, 1846—7.

	1838	1839	1840	1841	1842	1843	1844	1845	1846	1847
Deaths registered in the December Quarters of 10 years	40,173	41,740	44,186	39,292	39,662	42,608	44,080	39,291	53,093	57,925
Deaths which would have been registered if the mortality had been uniform, and the Numbers had increased from 1838 at the rate of 1·75 per cent. annually	39,820	40,516	41,225	41,947	42,681	43,428	44,188	44,961	45,748	46,549
UNHEALTHY SEASONS Difference above the calculated number	353	1,224	2,961	..	..	..	..	..	7,345	11,376
HEALTHY SEASONS Difference below the calculated number	..	..	..	2,655	3,019	820	108	5,670	..	..

A slight increase in the mortality was noted in the returns of the *June* quarter, 1846; the mortality in the following hot *summer* when the potato crop failed was excessive; *cholera* and *diarrhœa* were epidemic: in the *autumn* of 1846, as well as the winter and spring quarters of 1847, the mortality was still higher; scurvy prevailed in the beginning of the year, but in the summer the public health appeared to be slightly improved. Epidemics of typhus and influenza however set in; and made the mortality in the last quarter of 1847 higher than in any quarter of any year since the new system of registration commenced.

DEATHS REGISTERED in each of the Four Quarters of the Nine Years 1839—1847, in 117 of the DISTRICTS of ENGLAND and WALES.

Quarters ending	1839	1840	1841	1842	1843	1844	1845	1846	1847
March	42,410	46,376	46,967	44,903	43,748	46,136	49,949	43,850	56,105
June	41,244	42,074	39,133	38,569	40,343	38,977	40,847	43,734	51,585
September	37,317	39,498	36,058	39,409	36,953	38,933	36,139	51,427	49,479
December	41,740	44,186	39,292	39,662	42,608	44,080	39,291	53,093	57,925
TOTAL	162,711	172,134	161,450	162,543	163,652	168,126	166,226	192,104	215,094

The deaths in the year 1845 were 166000; in 1847 *two hundred and fifteen thousand.* The excess in 1847 is *forty-nine thousand!* or not less than 35000 over the corrected average of 1839—45. The districts from which the Quarterly Table is made up, have hitherto returned less than half the deaths in England; but it is not probable that the country districts have suffered to the same extent as most of those in the return.

In London the deaths registered in the quarters ending December 1845—6—7, were 11838, 13221, and 18553, (13 weeks). The greatest number registered in any quarter of the 9 previous years was 14686 in the severe winter of 1845.

It was shown in the last quarterly report on the state of the public health, that if the chance that a child in the country under 15 years of age will die in three months be represented by 1, the chance that a child under 15 in London will die in the same time is represented by 2. It was also shown that the chance of dying among men above 35 in London, is to that in the country as 3 to 2: and it was remarked that "if the chance of dying is increased from 2 in the country to 3 in London, *the liability to suffer* FROM EPIDEMICS *is raised still more.*" The truth of this proposition has unfortunately been too soon exemplified. The population was inadequately supplied with potatoes, and scurvy was prevalent in the beginning of the year. Meat and bread were dear, distress was rife; vagrants flocked in from the country, the poor Irish came to their kindred, the workhouses were crowded. In April and May typhus became epidemic; instead of the average of 34, *fifty* died weekly; it steadily spread and burnt on until it killed a hundred and eleven victims in a single week. Diarrhœa, dysentery, and cholera had been a little more fatal than usual throughout the year: 17, however, only died of these diseases in the first week of July; the mean temperature of the air was above 60°; the number of deaths rose to 38, 47, 67, 125, 128, 188, by the middle of August, and then gradually subsided. Notwithstanding the continued prevalence of typhus and scarlatina, the deaths in the last week of October were only 945; one person died of influenza, 36 of bronchitis (inflammation of the air tubes), and 62 of pneumonia (inflammation of the substance of the lungs). In the three weeks following, ending November 20, the total deaths were 1052, 1098, and 1086; of which 2, 4, and 4, were by influenza; 49, 58, and 61 by bronchitis; 68, 79, and 95, by pneumonia. The wind had generally been blowing S.S.W. and S.W. since the first week of October; the weather was unusually warm; a brilliant aurora was observed, and shook the magnets on October 24; it appeared eight times during the quarter; on Tuesday, November 16th, there was a remarkable darkness; the wind changed to N.W., and amidst various changes still blew from the north over Greenwich at the rate of 160, and 250 miles a day. The mean temperature of the air suddenly fell from 11° above, to 10° below the average; on Monday it was 54°, Friday 32°; the air on Friday night was 27°, the earth was frozen; the wind was calm three days, and on Saturday evening a dense fog lay over the Thames and London for the space of five hours. No electricity stirred in the air during the week. All was still: as if Nature held her breath at the sight of the destroyer, come forth to sacrifice her children. On Sunday the sky was overcast, the air damp, the wind changed in the night to S. by E., and passed for four days over Greenwich at the rate of 200 and 300 miles daily; the temperature suddenly rose, and remained from 2° to 9° above the average through the week ending November 27th: when the deaths of 1677 persons, 819 males, and 858 females were registered; 771 persons under 15 years of age, 518 aged 15—60, and 388 of the age of 60 and upwards. Influenza was epidemic. On the first week of December *two thousand four hundred and fifty-four* persons died: 1141 were males, 1313 females; 1012 children, 712 persons in the prime of life, 730 of the age of 60 and upwards. On the week following *two thousand four hundred and sixteen* persons died: 1175 males, 1241 females; 1016 under the age of 15; 698 at the age of 15—60, and 702 at the age of 60 and upwards. The deaths in the weeks ending Saturday, December 18, December 25, and January 1, were 1946, 1247, and 1599. 11339 persons died in six weeks, and altogether the epidemic carried off more than 5000 souls over and above the mortality of the season. The epidemic attained the greatest intensity in the second week of its course; raged with nearly equal violence through the *third* week; declined in the *fourth*, and then partly subsided; but the temperature falling, the mortality remained high not only through December, but through the month of January.

The epidemic was most fatal to adults and to the aged: thus in the three weeks ending November 13, the deaths under 15 years of age were 1553; in the three weeks of the epidemic ending December 18, the deaths under the age of 15, were 2846. In the same *two periods* the deaths at the ages 15—60 were 966 and 1970; at the age of 60 and upwards 576 and 1999. The mortality in childhood was raised 83 per cent., in manhood 104 per cent., in old age 247 per cent. From the age of 4 to 25, however, the mortality was comparatively not very much increased; at the age of 10 to 15, the healthiest period of life, it was scarcely increased at all—in girls.—*(See Table, p.* 14.*)*

During the 7 years 1838—44 the deaths of males in London were more numerous than those of females in the proportion of 1746 males, to 1674 females; in the second week of the influenza epidemic the proportions were reversed, for 1141 males, and 1313 females died; in the six weeks ending January 1, the deaths of 5580 males, and 5759 females were registered. Looking, however at particular ages, the deaths in the six weeks under 5 years of age were—2321 males, 2009 females; from 5 to 55, males 1580, females 1507; 55 and upwards 1678 males, 2241 females. At all ages there are more females than males living in London; at 55 and upwards the males in 1841 were 71384, the females 90328; at 75 and upwards, males living 6788, females 11147. A disease much more deadly in the old than in middle aged and young people, therefore necessarily increases the total deaths of females, more than the total deaths of males, without for that reason being more fatal to the female than to the male sex. The difference in the mortality of males and females from the epidemic is but slight, and can only be determined by nice calculation—into which I shall not enter here.

Influenza attacked those labouring under all sorts of diseases, as well as the healthy. The vital force was

extinguished in old age and chronic diseases. The poison, permeating the whole system, fastens chiefly on the mucous membrane lining the sinuses of the face and head, and the air tubes of the lungs. Hence it is fatal to the asthmatic; the deaths directly ascribed to asthma in October and November were 12 weekly; in the six weeks of the influenza epidemic, 77, 86, 78, 52, 14, 26, besides the numerous cases classed under influenza. 36 deaths were ascribed to bronchitis in the week ending October 30th, and 49, 58, 61, 196, 343, 299, 234, 107, and 138 in the nine following weeks. 62 deaths were ascribed to pneumonia in the same week, and 68, 79, 95, 170, 306, 294, 189, 131, 148, in the nine weeks following. In some of these cases the inflammation specified was the primary disease, in others secondary, and in many it was purely influenza—mis-reported. There is a strong disposition among some English practitioners, not only to localize disease, but to see nothing but a local disease; hence although it is certain that the high mortality on record was the immediate result of the epidemic of influenza—the deaths referred to that cause are only 1157; namely in the first week of November, 2, and in the eight weeks following 4, 4, 36, 198, 374, 270, 142, 127; and these include nearly all the cases in which influenza was returned, whether as primary, or secondary in conjunction with other diseases. A similar defect has hitherto been found in the returns of all great epidemics; in 1665, the great plague year, 97306 burials were returned in the London Bills of Mortality, only 68596 of which were ascribed to plague. Influenza attacked persons labouring under other zymotic diseases: thus the deaths from hooping cough rose from 12 and 25, to 65 and 71 during the epidemic; the deaths from measles rose from 43 to 96, 89, 69, 75, during the first four weeks of the epidemic, and then subsided to 37 and 58. Typhus which had been fatal to 70 and 80 weekly rose to 132, 136, and 131, in the second, third, and fourth week of the influenza epidemic, and then fell to 83 and 74. Although influenza is not mentioned in these cases it is in others, and there can be little doubt that two or more zymotic processes do often go on simultaneously in the blood and body; a fact of profound interest to the pathologist, and worthy of attentive investigation.

The epidemic was much more fatal in some districts of London than in others. To shew this, I take the deaths in each of the London districts during the six weeks from November 21st, 1847, to January 1st, 1848—and comparing them with the population, obtain the relative mortality. It was at the *rate of* 46 per annum to 1000 living in London; the mortality in the seven years, 1838—44 was at the rate of 25 annually to 1000; the mortality was consequently raised for 6 weeks, by the epidemic, about 80 per cent. above the average. Lewisham, including Blackheath, Sydenham, and Eltham, is one of the healthiest districts in London; the ordinary rate of mortality is 17 annually, during the epidemic it was 27. St. George in the East is one of the unhealthiest districts; the ordinary rate of mortality is 29 in 1000, the rate of mortality during the epidemic was 73: the increase in Lewisham was 10, in St. George in the East 44; the latter district suffered *four times* as much from influenza as the former. Excluding districts which contain hospitals or the workhouses of other districts we have the following result.

Deaths to 1000 *annually.*

	Mean Annual rate of Mortality, 1838-44.	Annual rate of Mortality during the last 6 weeks of 1847.	Difference in the Mortality ascribable to the epidemic.
Least unhealthy districts of London.			
6 districts of London in which the ordinary mortality of Females is lowest	20	38	18
Unhealthiest districts of London.			
6 districts of London in which the ordinary mortality of Females is highest, *see p.* 12.....	27	61	34

The epidemic of influenza killed twice as many people in the insalubrious parts of London, as it did in those less unhealthy: its fatality in Lewisham and St. George in the East was as we have seen 1 to 4. The annual average rate of mortality for London, in 1730—39, was 41 in 1000; the rate in the 6 weeks of the epidemic of 1733 was 72 in 1000; the increase was 31 in 1733; the increase in 1847 was 21.

Let us look to the few country and small town districts in the present return. The deaths in *St. Albans,* (population 17000 in 1841,) during the last quarters of the four years, 1844—7, were 94, 75, 91, and 76. The Registrar of the sub-district of St. Albans says, "*No epidemic has visited this district.*" The deaths in the Kendal district (population 35 000) during the last quarters of the four years were 160, 213, 268, and 155; in Anglesea, (population 38000) the deaths were 155, 163, 206, 158. The Registrar of Llanddausaint, Anglesea, says, "latterly influenza has been prevalent;" but it was, as has been seen, not very fatal. In the Isle of Wight (population 43000) the deaths in the December quarter of the four last years were 235, 167, 201, 179. The Registrar of the Godshill sub-district says, "*The district would be healthy, but for influenza, which has just made its appearance; but no case has yet been*

"*fatal.*" Epidemic *influenza* is mentioned in the notes by the Registrars of Maidstone, Brighton, Portsea Island, Northampton, Cambridge, Norwich (*mild—"fatal to few"*), Yarmouth, Exeter, St. Thomas, (*this is the district round Exeter; influenza had just made its appearance at Topsham,*) *Plymouth*, (very fatal in St. Andrew's sub-district, deaths in October 48, November 49, December 103; Charles the Martyr, sub-district, deaths in October 17, November 26, December 63), Redruth, Penzance, Bath, (Lansdown, sub-district, deaths in the three months, 16, 21, 47; the Abbey, 18, 19, 58), Bristol, Clifton, Stroud, Hereford City, ("*influenza is just appearing,*") Shrewsbury, Walsall, Wolverhampton, Burslem, Birmingham, Aston, Coventry, Leicester, Lincoln, Nottingham, (St. Ann sub-district, deaths in three months, 35, 33, 76,) Basford, Derby, Stockport, Macclesfield, Great Boughton with Chester, Liverpool, West Derby, Preston, ("*influenza prevailed during the two last weeks of December*"), Bury, Bolton, Wigan, Prescot, Chorlton Manchester (Ancoats, deaths in October 169, November 135, December 270), Salford, Ashton and Oldham Sheffield, (West sub-district, deaths in October 27, November 27, December 85), Huddersfield, Halifax, Bradford, (Horton sub-district, "*no particular disease, except in* 10 *days commencing November*, 27, *when influenza was prevalent*"), Leeds, Hunslet, York, (Walmgate, sub-district, deaths—October 61, November 52, December 99,) Sunderland, Tynemouth, Newcastle-upon-Tyne, Carlisle, (*"no epidemic disease prevalent at present in Dalston, Carlisle,"*) Pontypool, Wrexham, Anglesea. The Quarterly Return includes few of the country districts; but it is evident that influenza pervaded England generally; in many places it appeared later than in London; some places it has not yet reached at all, or its visitation has been so slight as not to attract attention. The mortality was raised in the unhealthiest towns; but on the whole much less in the mixed town and country districts than in London. The deaths in the December quarters of the four years, 1844—7, were in the districts of London, 13819, 11838, 13221, 18553, (thirteen weeks):—in the other districts, 30261, 27453, 39872, and 38320. In the latter districts notwithstanding the epidemic influenza, the mortality on the whole was lower in 1847 than in 1846. The weather, as will be seen, from Mr. Glaisher's lucid statement, (p. 30), did not differ much in any part of the country.

Edinburgh. Dr. Stark, to whom Edinburgh is indebted for tables of mortality, states that in that city influenza suddenly attacked great masses of the population twice during the course of November; first on the 18th, and again on the 28th day of the month. It appeared, in both cases, during keen frost, and an excessively damp, thick fog, which came on rather suddenly after a few days of very mild weather. The total deaths returned, exclusive of still-born, were in October 521, November 728, December 1001. The mean temperature of Edinburgh in December was 39°; the highest 57°, the lowest 21°.*

Our knowledge of the progress of the epidemic in other countries is necessarily imperfect, as no weekly tables are yet published in any of the great continental cities. We learn however, from the medical and other journals that the *grippe* which had prevailed for a week was at its height in Paris about December 4th; when one-fourth or one-half of the population were laid up, (Un quart, si non la moitié de la population est couchée.—*Gaz. Médicale.*) It is stated that 50000 of the inhabitants of *Madrid* were in bed, suffering from influenza on January 11th. The epidemic still prevailed on the 19th, and was exceedingly fatal. London was probably attacked afew days before Paris; Madrid a month later. In a former epidemic (1782), influenza attacked London at the end of May, France in June, Italy in July, and Spain in August. It travels faster now. The present epidemic reigned in Rennes October 30, (Prof. Toulmache, in *Gaz. Med.*) Influenza attacked the crew of the Lousquor French packet in the Mediterranean in October, and was so general that in difficult circumstances, the surgeon believes the vessel must have been lost. The epidemic did not prevail in Marseilles when the Lousquor left. The Albatros and Nile had cases at sea, but the epidemic was in full force at Toulon and Marseilles when they left port.† Dr. Laval, a member of the council of health at Constantinople, states that influenza broke out in that city towards the end of August (1847) and prevailed, though not to a very great extent for a month or six weeks.‡ A slight epidemic of *cholera* broke out in October, and still reigns in Constantinople. Respecting the influenza epidemic in Germany, Russia, and Italy no authentic information has come to hand.

By returns already received at the office of the Director-General of the Medical Department of the Navy, and with which I have been favoured by Sir William Burnett, it appears that epidemic catarrh or influenza prevailed on foreign stations during the year 1847, as under noted. In January, and February—on the coast of Portugal and South coast of Spain. January, February, March—in Newfoundland, and New Zealand. February, March—at Valparaiso. April—Coast of Syria. July, August, September—West Coast of Africa south of the Equator. August—Hong-Kong.

Coryza, gravedo, destillatio, and other forms of catarrh are described by the ancients. The disease is called *pose* in old English writers from the Anglo-Saxon *gepose* (heaviness, stupor.) Epidemic catarrh is mentioned by

* Report by J. Stark, M.D.
† Bull de l'Acad. Royale de Med. T. 13, n. 12. 13. Mem. from Dr. Renault, Surgeon of the Lousquor.
‡ Letter dated 25 Nov. 1847, in the Gazette Médicale,

Targioni Tozzetti in the Cronica Meteorologica of Tuscany under the years 1323, 1328, 1358, 1387. Cullen cites other instances in his Nosology* under the years 1510, 1575, 1580, 1591, 1658, 1675, 1679, 1708—9, 1712, 1729, 1732-3, 1737, 1742-3, 1748, 1758, 1762, 1767, 1775, 1779-80. Ozanam adds the years 1239, 1311, 1327, 1400, 1403, 1438, 1482, 1505, 1557, 1597, 1627, 1669, 1691, 1695. Some of these epidemics, and others which he describes, were apparently local.†

The disease when severe runs into inflammation of the lungs and pleura, and there can be no doubt that several of the epidemic pleurisies and pleuri-pneumonias of the middle ages were what is now known as *influenza*. The malignant pleurisy at Venice in 1535, which pervaded Brescia and Lombardy in 1537; as well as the epidemic pleurisy of Switzerland, and Upper Italy in 1551 are examples.‡ The more celebrated epidemic of 1564 is said to have appeared first in England; to have spread thence to the Netherlands, Holland, and Switzerland. Patients died in 3—6 days, after violent delirium, coma, apoplexy. Vast numbers were victims of the epidemic; and physicians, who at that time began to examine bodies after death, learnt that "inflammation of the substance of the lungs may be combined with pleurisy." Sydenham notices that peripneumonia, and pleurisies committed great slaughter at the end of March, 1665—theyear of the great plague.§ The winter had been excessively cold, and with a dry frost lasted till spring; a sudden thaw took place in March. Influenza was epidemic in England in 1657; it broke out in April, *(Willis de Febribus.)* Influenza, described tolerably well by Sydenham as, *Tusses epidemicæ anni* 1675, *cum pleuritide et peripneumonia supervenientibus*,§ and distinguished by him from pure pleurisy, spared scarcely anybody; attacked all ages and temperaments; and seized whole families together (*integras simul familias pervadentes*). It was dangerous. The previous years 1674, 1675, are referred to as a period of great dearth; the harvest of 1673 proved defective; and wheat which was 36*s.* per quarter on Lady-day 1673, was 64*s.* on Lady-day 1674. The epidemics of 1709 and 1729—30, in Germany appear to have been well described by Hoffman. Epidemics in 1728, 1733, 1742, 1758, 1762, 1775, 1782, 1788, 1803, 1831, 1833, and 1837 have been mentioned, several have been fully described by English writers. An abridged account of them is given elsewhere from the original accounts. The symptoms in these epidemics only differed in severity, and from complications with other maladies. *(See p. 7.)*

Influenza, like small pox probably always exists; in ordinary circumstances it is confounded with inflammation of the air tubes, yet in London from one to five deaths have been directly referred to it, nearly every week since the new London Tables were published (see Table p. 14). Like other zymotic diseases it becomes at intervals of some years, epidemic; that is, it attacks the people generally of all classes. Its epidemics are distinguished by the numbers they assail; by affecting the same persons more than once; by being most fatal to the aged, of both sexes, and therefore, where there are more old women than old men, causing the deaths of females to exceed those of males during their prevalence; by great differences in the severity and fatality of their attacks; by the rapidity of their course, and passage from place to place. After the mortality they occasion becomes apparent in London, it attains a maximum in the *second* or *third* week; and the mortality falls to the average in the *sixth* or *seventh* week—*(See table, p. 10.)* Influenza appears to be generated in ill-organized camps, in crowded, ill-cleansed cities; and to be most fatal among people who have for some time been depressed, ill-fed, or ill-supplied with vegetables, as after hard winters and in war;‖ it rages in cold and hot, moist and dry weather, but most frequently breaks out after a thaw, or with violence after a fog, generally the result of cold streams of air mixed with warm air—and a calm. The saturation of the atmosphere favours the transformation of all organic matters; and those of a zymotic character among the rest. Extreme cold only, never raises the weekly mortality in London above 1500; extreme heat still less; intermediate changes affect the mortality but slightly in ordinary circumstances; November fogs occur every year without giving rise to influenza; in November, 1847 the weather was nearly the same all over England, yet influenza did not break out simultaneously. When once generated the epidemic spreads through the air. The great epidemics generally travel from (1) Russia, over (2) Germany, (3) Denmark, Sweden, England, France, (4) Italy, Spain—in from three to six months; and then reach America. Influenza is often associated with other epidemics. It appears to have preceded, or accompanied the plague, in the black death of the 14th century¶; it preceded the great plague of London (1665); it followed epidemic typhus in London 1803, preceded it in 1837, occurred in the midst of the typhus epidemic of 1847, preceded and followed the epidemic cholera in 1831—2—3. It carries off asthmatic persons, and those suffering from chronic disease: it affects those labouring under other zymotic diseases; in the healthy it quickens the seeds of other maladies, particularly of the lungs. The fatality and duration of attacks vary with age. In some of

* Art. 39, Catarrhus acontagio. † Histoire Med. des Maladies épidèmiques, tome I, page 93—218.
‡ Sprengel's, Histoire de Med., vol. iii. p. 88. And authors cited. § Syd. Opera Obs. sect. 2, cap. i.; sect. 4, cap. v.
‖ "Morbi præsentes à præteritâ temporum conditione fluunt; accipiunt verò etiam differentiam à conditione præsentis: quare utriusque oportet habere rationem." The first part of this profound Hippocratic aphorism, which applies to revolutions as well as epidemics, is often overlooked.
¶ See Hecker (Epidemics of middle ages.) The symptoms were not as he assumes, those of simple bubo plague. The pulmonary symptoms are always dwelt on by the contemporary writers: and Fracastorius referring to the Black Death, specifies them exclusively:—

Insolita exarsit febris, quæ pectore anhelo,
Sanguineum sputum exagitans, (miserabile visu!)
Quartâ luce frequens fato perdebat acerbo.—Fracastorius, *Syph.* Lib. I, v. 189.

the late epidemics 2 in 100 cases attended by medical men are said to have died;* if this was the rate of mortality in London, for 5000 deaths there must have been 250000 cases of sickness of not less than seven days duration. This would be little more than one in eight of the population; but nearly all were affected more or less; and without taking slight instances it is probable that not less than 500000 persons in 2100000, suffered in London from the epidemic of 1847.

The English physicians of the 18th century agreed in pronouncing influenza *contagious*. By this they did not mean that it was propagated by *contact;* but that it was introduced into cities, institutions, and houses in England by persons actually affected by the disease. This notion is however too exclusive; the word "contagion," applied to influenza or cholera is apt to mislead, and to have practically a bad effect. When people ask if a disease is contagious, they generally mean: "Are we more likely to have influenza or cholera if we touch, or go near persons labouring under these diseases?" Now if the matter of contagion is very diffusible, and is distributed equally through the room, the house, the street, the city in which a patient is lodged, no one living in the house, street, or city is much more likely to be infected if he approach the sufferer, than if he remain in absolute solitude, shut up like the grocer of Wood-street in the plague. The matters which excite influenza and cholera are evidently highly diffusible; in a few days influenza spread all over London; it met you everywhere: nobody therefore, has attempted to shew that medical men, nurses, or others in attendance on the sick, suffered more than other people. If such should ever be the case either in the influenza or the cholera epidemics, it will be in rare circumstances, and should never deter the most timid from discharging their duties to the sick.

The earth, it is well known, is surrounded by an atmosphere of organic matter, as well as of oxygen, nitrogen, carbonic acid, and watery vapour. This matter varies and is constantly undergoing transformations from organic into inorganic elements: it can neither be seen, weighed, nor measured. The chemists cannot yet test its qualities. Liebig, with all the appliances of the Giessen laboratory, cannot yet detect any difference between the pure air of the Alps, and the air through which the hound can tell a hare, a fox, or a man has passed; or the air which observation shews will produce small pox, measles, scarlatina, hooping cough, dysentery, cholera, influenza, typhus, plague. These matters may either be in a state of vapor, that is elastic, or inelastic; or like water, they may exist in both states. They are most probably in the state of suspension; hang, like the smoke in cities, over the places in which they are produced, but are spread and driven about like vesicular water in clouds. A stream of aqueous vapour of the same elasticity from the Atlantic, passing over England is, in one place, perfectly transparent; in another, mist; in another, rain: so clouds of infectious matter may fleet over the country, and in one place pass harmless by, in another (as influenza in London), destroy thousands of lives. The emanations from the living, the graves, the slaughterhouses, the heaps of filth rotting, the Thames—into which the sewers still empty—raise over London a canopy which is constantly pervaded by zymotic matters; in one season this, in another that, preponderating; and the epidemic influenza may easily be conceived, either to have broken out spontaneously, to have been conveyed here by ships, or to have been carried over by the winds;—as the cases of the Indiaman infected in the Chinese seas, our own fleets, and the Lousquor in the Mediterranean—seem to imply that *influenzine* may be carried great distances over the ocean, from the place of its origin.

Proinde ubi se cœlum, quod nobis forte alienum est,
Commovet, atque aer inimicus serpere cœpit;
Ut nebula ac nubes paulatim repit, et omne
Qua graditur, conturbat et immutare coactat;
Fit quoque ut, in nostrum quum venit denique *cœlum*,
Corrumpat, reddatque sui simile, atque alienum.

The zymotic hypothesis, here so well stated, explains the phenomena to a certain extent. Still epidemics afford a vast field for research; for much remains to be investigated.† The mariner, however, steers his ship without knowing whence the winds come, whither they are going, or why they are blowing; so, as the returns adduced above, establish beyond a doubt, the fact that influenza was four times as fatal in one part of the population of London as it was in another, and that it is much more fatal in a part commonly insalubrious than in a part usually healthy, the course to be pursued is plain. If the means which improve the public health are applied with intelligence and energy, the general mortality can be reduced; and the ravages, either of any future influenza, or of the coming cholera, can be rendered inconsiderable.

The piety of the ancients, and of our ancestors made them consider all plagues the immediate visitations of God's wrath.‡ And there can be no doubt, that though as affecting individuals there is nothing now

* See a return by Dr. Bain of the mortality at *different ages* among 317 persons, and a lucid description of the epidemic of 1837, as it appeared in London; British Annals of Med., vol. 1. p. 265;—and the able Report on the influenza of 1837 by Prov. Med. Assoc. Trans. vol. vi. Data might now be procured for determining the exact mortality at different ages of complicated and uncomplicated cases.

† The inquiry would be greatly facilitated if such meteorological returns as the Astronomer Royal now supplies; and weekly tables of the causes of death were published on a uniform plan in Paris, Berlin, Stockholm, Petersburgh, Moscow, Vienna, Venice, Rome, Naples, Madrid, Lisbon, Cairo, Constantinople, and Calcutta.

‡ Morbos tum ad iram Deorum immortalium relatos esse."—Celsus.

judicial in plagues; they are the results of great national violations of the laws by which the Almighty is pleased to govern the universe. It has been shewn, year after year, that the impure air of London destroys thousands of lives—that it makes epidemics fatal: the causes of the excessive mortality have been pointed out; and it has been proved that they admit, to a considerable extent, of removal. Yet the efforts of Her Majesty's Governments to introduce sanatory measures were strenuously opposed up to the close of the last session of parliament. The population of London was left at the mercy of any epidemic that should break out in any part of the world. During six weeks influenza interrupted business, afflicted hundreds of thousands by sickness, implanted fatal diseases in the breasts of many, and destroyed five thousand of the inhabitants! Are the men who opposed sanatory measures, and declared so loudly, that the "City of London for *health, cleanliness, effective drainage, lighting*, and *for supply of water* to its inhabitants, *cannot be surpassed*," satisfied? or will they fight against the public good, till cholera drive away their best customers, and decimate their own families? Let us hope that, instead of pursuing such a course, they will assist in supplying London with the necessaries of city life, which they have enumerated, and which they now know are wanted.

PREVIOUS EPIDEMICS OF INFLUENZA IN ENGLAND.

1728, an epidemic catarrh prevailed in the beginning of January. (*a*) 1727—9, was a period of some dearth Wheat rose from 4*s.* to 8*s.* a bushel. The winter of 1728 was almost as rigorous as that of 1709, when Influenza broke out in Frederic's new city of Berlin.

1733. (*a*) Influenza invaded the northerly parts of Europe before the southerly; was in Saxony, November 26, and lasted in its vigor fourteen days; was earlier in Holland than in England; in Edinburgh than in London; where it lasted in its vigor from about the end of January for about three weeks; the bill from February 3—10, contained in all 1588 deaths, being higher than any since the plague. This is equivalent to 5304 deaths in the present population (2100000); for the population in the bills then was about 650000. The mortality in 1733 was nearly double that in the epidemic of 1847. The deaths in the three years, 1731–2–3, were 25262, 25358, [29233,] according to the London Bills. The price of wheat was low in the three years; 33*s.* 27*s.* & 28*s.* a quarter at Eton. The epidemic began in Paris about February 1, and lasted till the beginning of April. It raged in Naples, and Southern Italy, in March and April. It was four months in passing over these parts of Europe. Huxham, writing at Plymouth, says it seized upon rich and poor; scarce any escaped, old or young, strong or infirm, either in the town or country. It was in Cornwall in January; but attacked Plymouth on February 21. It was a Saturday, on which a very great number were as it were suddenly seized; the next day an infinite number felt it, and by the 29th of March everybody everywhere. Few died at Plymouth, and those were chiefly infants and old asthmatic people. In 1728 and 1733, a most vehement cough seized almost all the horses about a month or two before it attacked mankind.—*(Huxham.)* Under 9 Geo. I. (1722-3) the workhouse system came into operation, and many parishes farmed out their poor at low rates. The Persians under Kouli-Khan defeated the Turks in 1730.

1743. (*a*)—Another epidemic raged through all Europe in 1742 and 1743; the disease obtained the name of *Influenza:—per totam Europam hoc vere subnomine Influenza,* are the words used by Huxham; (*a*) hence the learned Sprengel is mistaken when he says that the disease was first called influenza in 1762. (*b*) At the end of 1741 remarkable auroras were visible; in February, 1742, Influenza, became epidemic in Saxony; it was at Milan in November, Venice in December, France in March, 1743. In the spring of 1743, it increased the funerals in London to 1448 in one week. The burials in London in the six years 1739–44, were 25432, 30811, 32169 27483, [25200,] 20606. The winter of 1739—40 was one of extraordinary severity and duration; coals were 2*s.* a bushel, water dearer, bread was dear, there were riots. Fever appears to have been epidemic; at the beginning of 1742 the assize of wheaten bread was 5½*d.*, at the end 4¾*d.* the quartern loaf. This was cheap at that time. The plague, swept off 50,000 of the inhabitants of Messina in 1743.

The four years 1739–42 were passed in cruel destructive wars, waged by Nadir Shah, Kouli Khan, and the Turks in Asia; Frederick, Maria Theresa, Louis XV., in Germany; the Swedes, the Russians, and the Turks, in their own dominions; Spain and England, in America. Vernon and Wentworth were ordered to return in September 1742, after the disastrous expedition of Carthagena; Anson was away on his fatal, but not unfortunate voyage round the world.

1758. The summer and autumn were warm and dry, the wind easterly, the epidemic influenza made its appearance in Edinburgh in September, was very general in October, at the end of which it began to decline. It did not appear at St. Andrews until October 10; nor at Inverness until the middle of the month. It was most fatal at Dundee, Perth, and Glasgow. (*c*)

1762. Sir George Baker commences his relation by saying that on April 4th, three persons were attacked in the same house by the same disease; and that by April 24th it had spread through the whole of London. It attacked all indiscriminately, and was fatal to the aged, and particularly to those who were asthmatic. The burials in the bill for the week ending May 4, were 467, and for the weeks following 626, 750, 659, 516, 504. The burials in each of the 5 years 1760—4 were 19830, 21063, (26326), 26143, 23202. Influenza raged in

(*a*) Arbuthnot on Air, p. 193. Huxham de Aëre, An. 1728, 1733, 1743. The dates given in O.S. are converted into new style.

(*b*) It was called *grippe*, (which is "whim," in French—and also suggests *gripper*, to grip, to seize,) in Paris during this epidemic; it had formerly been called coqueluche, ("a cowl,"—also "the reigning fancy,") and in some, of the epidemics had been apaprently confounded with hooping-cough. The epidemic has hitherto been the occasion of *bons mots* for our *spiritual* neighbours; it will be well worth the while of the public, even for the sake of change, to look at it seriously now, and to support the able men in France, who think that Paris would be all the merrier for being clean and healthy. In the sixteenth century, influenza was called "the new acquaintance" in Edinburgh, at the Court of Queen Mary.

(*c*) Med. Obs., vol. ii., comm. by Dr. Whytt, Dr. Alves, Dr. Simpson.

Warsaw at the end of February, (the deaths from 30—40 rose to 150 weekly; at Magdeburgh in April, Hamburgh in the beginning of April, Alsace in June, in the Mediterranean among British sailors in July. It was more fatal in Venice than elsewhere. Paris was not visited. It was unknown in Britain until it invaded London; and in many cities, notably in Norwich, Lincoln, Leicester, Exeter, those first attacked were strangers lately arrived from London. A dysentery followed in July, and is described by the same author. (*d*) The war with France ended in the peace of Fontainebleau, November 3.

1767. Dr. Heberden mentions an epidemic cold, resembling that of 1762 in London, in June and July, when it entirely ceased. It brought on, anginas, pleurisies, and peripneumonias. Both sexes, and all ages were attacked. It occurred in other parts of England about the same time. The season preceding this was remarkably cold, while that in 1762 was remarkably warm. (*e*)

1775. Dr. Fothergill states that the influenza appeared about the beginning of November. Some in addition to the common symptoms had diarrhœa. The mortality was trifling considering that so many persons were attacked. Horses and dogs were much affected by the complaint. Sir John Pringle had sore throat himself, and no cough. He met with similar cases. He heard of this complaint in France, Italy, and the Low Countries; and inferred with Sir G. Baker that the "*sensible* qualities of the air had most probably no share in producing this complaint." Dr. Heberden saw the first patient on October 28th; and at the end of three weeks few were attacked who had escaped it up to that period. Two persons had eruptions like scarlatina. It "did not kill, but hastened the death of those who had other complaints." Sir George Baker saw it first about October 20th. Dr. Haygarth of Chester remarks that "it assumes a milder form in warm weather;" Dr. White of York that the epidemic "was checked by severe frost and snow."(*f*) The burials in London were 20514 in 1775; which was below the average of that period. This was towards the commencement of the American war.

1782.—This epidemic was reported on by a Committee of the College of Physicians, and by a great number of medical men all over the country. (*g*) Influenza in September, 1780, broke out in an East Indiaman sailing from Malacca to Canton, where it was raging violently at the same time that they had it on board. It broke out in the British army at Negapatam, in November, 1781, (Coll. com.) It prevailed at Moscow in December, 1781, and January, 1782; at St. Petersburgh, in February, 1782. It was traced to Tobolski, and supposed to have been brought from China. It reached Denmark at the end of April; many died of it at Copenhagen before May 11th. (Dr. Gray). It was in Scotland and Ireland, later than in England (June); France, in June and July; Italy, in July and August; Portugal and Spain, in August and September; afterwards in America.—(Dr. Grant.) It was most prevalent in London in the 4th week in May. Dr. Grant thinks that it first prevailed in London; the Committee of the college are uncertain, and say that it did not observe any regular progression from any one point of the compass to another. They note, however, that it appeared at Newcastle-upon-Tyne, at the end of April, and raged in May and June; in London, May 12—18; Norwich and Bury, the middle of May; Hadleigh, in May, but was worst in June; Kingston and Guildford, May 20th; Portsmouth in May; Oxford, the 3rd week of May; Chester, May 26; Plymouth, May 30; and Cornwall (west), May 19th; York and Liverpool in June; Edinburgh in May; but not at Musselburgh, within five miles of Edinburgh, until June 9th; nor at Glasgow until June. It appeared earlier in towns than in villages: in villages earlier than in detached houses. Dr. Parr of Exeter states, that the epidemic first appeared in Devon, May 23; was prevalent in June; disappeared in July; lasting in the county about seven weeks. Dr. Scott says it was first observed in Northumberland on June 1st; and then spread all over that county. It was fatal. In the beginning of June it affected the whole of the regiment in the castle of Edinburgh within a few days. The disease was almost universal in London, four-fifths of the people had it; few died, except the old and asthmatic. It seldom held any one more than a fortnight; some had three or four relapses. It generally went through whole families, seizing all simultaneously; in some instances, however, portions of families escaped. Of 700 boys at Christ's Hospital only fourteen had it, and those not severely. Three families, consisting of seventeen persons arrived on the same day at an hotel in the Adelphi all in perfect health; the next day they were all affected with symptoms of the reigning disease. In an hospital containing 170 persons more than 100 were attacked within twenty-four hours; few escaped afterwards. (*h*) A serjeant of the 10th Foot Grenadier Guards, visited London on furlough, when the disease raged there. He returned in a few days to St. Albans affected; and communicated the disease to the people in whose house he had his billet. It was the first appearance of the disease there and thence spread rapidly all over the town. (*i*) In this case much would of course depend on the care and judgment of the observer. Two Hanoverian regiments which arrived from Minorca, on July 23rd, at Plymouth, where influenza had ceased for ten or fourteen days, had nothing of the influenza before or after their arrival. On the other hand, a family who arrived in England from the West Indies in September, was attacked by influenza in October. Carmichael Smith observed, petechiæ and gangrene in two fatal cases; others terminated in malignant fever. Mr. Jacob met with erysipelas of head, abscesses in various parts, parotid and axillary, miliary eruption, pleurisy. In Cambridge it had a putrid type; with delirium. Some died suddenly, some had diarrhœa, (Dr. Macqueen). All agree in calling it a universal disease. It is worthy of remark, that in March, 1781, a distemper broke out among horned cattle; who were directed to be killed and buried, by order of Council, to prevent infection. The Gazette of August 27, 1782, contains dreadful details of the ravages of plague at Constantinople. Sir G. Baker observed, that influenza was more fatal in France, Holland, and Germany, than in this island. The Bills in London were not much swollen. The burials in four weeks ending May 28, were 299, 307, 336, 390; in five weeks ending July 2nd, 385, 560, 473, 434, 296. Neither the mortality of London nor of England was increased in 1782, above the average of the period; the burials in London, 1780—83, were 20517, 20709, 17918, 19029; in all England, 191736, 195902, 187152, 188264. The inefficiency, however, which it caused may be conjectured, from its effects in the fleets, employed at the close of the American war.

On the 2nd of May 1782, Admiral Kempenfelt sailed from Spithead with a squadron of ships under his command, of which the Goliah was one, whose crew was attacked with influenza on the 29th of that month; the

(*d*) De Catarrho et de Dysenteria. auct. G. Baker, Lond. 1764.
(*e*) Med. Trans., vol. i. p. 457.
(*f*) Med. Obs. and Enq., by a Soc. of Physicians in Lond., 1775. Queries were circulated by Dr. Fothergill.
(*g*) Medical Transactions, vol. iii., p. 54, and Medical Communications, vol. i., p. 2.
(*h*) Med. Trans., vol. iii., p. 59.
(*i*) Dr. Hamilton, Mem. Med. Soc. of London, 1782.

rest were affected at different times; *and so many of the men were rendered incapable of duty by this prevailing sickness that the whole squadron was obliged to return into Port about the 2nd week in June,* not having had any communication with any shore, and having solely cruised between Brest and the Lizard. The gallant Kempenfelt went down in the Royal George, August 30th of the same year.

About the 6th of May, Lord Howe sailed for the Dutch coast with a large fleet under his command; all were in perfect health towards the end of May. The disorder first appeared in the Rippon, and in two days after in the Princess Amelia; other ships of the same fleet were affected with it at different periods, some indeed not until their return to Portsmouth about the 2nd week in June. This fleet also had no communication with the shore until their return to the Downs, on their way back to Portsmouth towards the 3rd and 4th of June.

In 1788, there was an epidemic. It raged in Paris in July, Vienna in November. Dr. Willan in his reports for 1797 and 1800, mentions epidemic catarrhs; which he says were improperly termed influenza by many practitioners—as they were not "*infectious,*" nor general.

In the beginning of December, 1799, Influenza became epidemic in Moscow, and soon after that at Petersburgh. In January, 1803, it was epidemic in Paris.—*(Ozanam.)*

1803. Dr. Andrew Duncan, Edinburgh, met with cases of influenza on February 10; it was very common in March, contagious, not very fatal. He says it was common in London, February 3; its progress from Paris to London, London to Edinburgh, and from Edinburgh is a proof that it is contagious. Dr. John Scott says that it appeared at the end of March in the Isle of Man, it attacked patients already confined to their bed; it promoted phthisis, induced miscarriage. At Bristol, Dr. Carrick says it was provoked by exposure to cold, and sharp east winds, prevalent at that time, March. There had been a scarcity in 1800, and 1801; a famine and typhus followed. The annual deaths in London 1799—1804 were 18134, 23068, 19374, 19379, (19582), 17038. The annual rate of mortality among females in all England was 2.62; 2.52; 2.51; 2.19 in the four years 1801—4; after the year 1803 a remarkable decline in the general mortality of the country took place; and this was only disturbed by higher rates of mortality than 2.2 per cent. in 1807, 1808, 1810, 1825, 1826, until 1831.

Bateman in his reports, extending from 1804 to 1816 noticed in the three months ending February 1813, cases resembling the commencement of the epidemic influenza. The winter of 1814 was the severest since that of 1794—5; a dense fog in December 27; 1813 was followed by fog, snow, and frost in January, a partial thaw occurred, then the Thames was frozen over in February, and great multitudes were entertained in booths on the Thames. On many days the temperature was as low as 15°. The frost suddenly disappeared in March 20. About 200 of the dispensary cases assumed the form of acute catarrh; many were entered as catarrhal fever, 50 put on the character of the most active pneumonia. (*j*)

1831. An influenza epidemic began in London about the middle of May, and continued during June and a part of July, under very hot though damp weather. (*k*) The burials in the London Bills of the Parish Clerks, now become very defective, were 21645, and 25337 in the two years 1830, 1831; the mortality in the whole kingdom was 2.09, and 2.25 per cent. in the same years. The Polish insurrection broke out in November, 1830; Warsaw capitulated in December, 1831. Cholera raged in the armies in 1831; and was preceded by influenza. Cholera broke out as an epidemic at Sunderland, October 1831; the deaths of six persons were ascribed to it in the London Bill for the week ending February 14. Cholera raged with considerable violence in March and April for 9 weeks, subsided in May and June, and broke out a second time at the end of June, raging with considerable violence for 14 weeks, through July, August, and September. No cases were returned in February, March, April, May, 1833.

1833. "Influenza" broke out as an epidemic in the spring. The word first found its way into the Bills of the Parish Clerks for April 30, 1833. The burials returned for the eight weeks ending April 9, to May 28 were 321, 587, 796, 961, 940, 874, 575, 311. The cause of the excess in the mortality was influenza; to which however only 89 deaths were directly ascribed. "It spread over every part of Great Britain and Ireland during the spring of 1833, after having previously appeared in Russia and the northern parts of Germany, inflicting great mortality in every part of its course. (*l*) Cholera broke out in London again in July, epidemically, and prevailed through August and September.

1837. Influenza was epidemic during the month of December 1836, in Russia, Sweden and Denmark. In Copenhagen, 30000 persons were under the disease at one time, (Dr. Otto). In Scotland it was observed earlier than in England. It had been prevalent a fortnight in London before it reached Brighton. It appeared also in Lancashire, Cheshire, and Gloucestershire, from 7 to 14 days later than in London. Though very general some places in the neighbourhood of infected places seemingly escaped. Dr. Holland from whom this account is taken goes on to say:—

"The epidemic shewed itself in Paris about a month later than in London, having previously appeared at Calais and other intervening places. I saw patients who, *on their journey from Paris to London, had come upon an infected town, and been suddenly seized with the malady.* At Paris it was stated to have affected at least half the population, but seemingly with less mortality than in London. (?) The epidemic spread gradually over other parts of France. About the end of February it affected the northern coast of Spain, the more conspicuous there from its influence on the events of the civil war, then raging in Biscay and Navarre. Almost at the same time it appeared at Lisbon—a new occurrence in that city—spreading *successively* to the several towns which lie upon the Tagus, even to the Spanish frontier. Dr. Leitao, who has narrated its progress in Portugal, seeks to shew that it is contagious, and was brought directly from England to the British squadron in the Tagus, in the vessels of which it first appeared. The same idea prevailed in Biscay as to its manner of importation. The disease reached Madrid about the end of March, and prevailed there the whole of April.

(*j*) Bateman's Reports, pp. 212, 226, 232.
(*k*) Dr. Holland's Medical Notes, p. 200.
(*l*) Medical Notes by H. Holland, M.D., 2nd ed., p. 196.

"In Germany the influenza appeared at Berlin in January, affected Dresden somewhat later, and Vienna and Munich a fortnight after Dresden. At Hamburgh, where it appeared in the first days of January, Dr. Rothenburgh states, that more than half the population was attacked. I do not possess any information as to its progress in Italy. In Malta it first shewed itself about the 1st of June.

"A remarkable fact is, that an epidemic, having the characters of the influenza of the northern hemisphere, prevailed at Sydney and the Cape of Good Hope in the latter part of 1836; the time thus corresponding with its earliest appearance in the North of Europe, though under a date of *season* wholly different. Sir John Herschel informs me, that the weather was warm and apparently genial, at the time when almost every individual in the Cape District was suffering under the epidemic. The malady spread up the country as far as Gnadenthal, producing there considerable mortality in the Hottentot population. *(m)*

Cholera was epidemic in Germany, but not in England during 1837. Typhus was epidemic in England, and the mortality of females in 1837, *(n)* through the country, was 2·52; or considerably higher than it had ever been since 1801. The mortality in the year 1832, when cholera was epidemic, was only 2·42 per cent.; in 1833, when cholera and influenza were epidemic, it was 2·30 per cent. The new system of Registration came into operation in July, 1837; and the mortality of females never exceeded 2·10 in any of the eight years 1838—45; except in 1840, when it was 2·20, and in 1838 when it was 2·14 per cent. Influenza was slightly epidemic from February 20th, to April 24th, 1841; but the weekly deaths by the new tables never exceeded 1079, and ranged from 780 to 1079, during that time. Influenza prevailed to a slight extent at the end of 1846, and the beginning of 1847.

DEATHS from all causes returned in each of Five Series of Nine Weeks when Influenza was Epidemic, and most fatal.

INFLUENZA EPIDEMICS.					
No. of Week	1733	1743	1833	1837	1847
1	529	478	321	228	1098
2	531	579	587	284	1086
3	783	1013	796	477	1676
4	1588	1448	961	871	2454
5	1166	1026	940	860	2416
6	628	629	874	598	1946
7	591	537	575	558	1247
8	613	500	311	350	1599
9	507	423	479	321	1364
Weekly Average Return..	502	501	429	429	980

Number of DEATHS that would have been returned in each Week if the Population had been the same as in 1847, viz., 2139209.

INFLUENZA EPIDEMICS.					
No. of Week	1733	1743	1833	1837	1847
1	1767	1561	684	486	1098
2	1773	1891	1251	605	1086
3	2615	3309	1696	1016	1676
4	5304	4730	2047	1856	2454
5	3894	3351	2003	1832	2416
6	2097	2054	1862	1274	1946
7	1974	1754	1225	1189	1247
8	2047	1633	663	746	1599
9	1693	1382	1021	684	1364
Weekly Average Return.....	1677	1636	914	914	980
Total Deaths in 9 Weeks.	23164	21665	12452	9688	14886
Number of Deaths that would have happened if the average Mortality had prevailed in the 9 weeks.... .	15093	14724	8226	8226	8820
Difference	8071	6941	4226	1462	6066

Huxham and Arbuthnot described the great epidemic influenza of 1733; we take the following passage from Arbuthnot, as the account is in a popular style.

XI. "There have been of late, two remarkable instances of the influence of the air in producing an epidemical disease, perhaps over the greatest part of the surface of the earth; the first happened in the year 1728, the last in the latter end of the year 1732, and beginning of 1733; which being the more recent and remarkable, I shall give a short description of it, till a more particular one can be procured from the collected memoirs of the several countries which it invaded, of which I have seen only a few.

XII. "The previous constitution of the air was in *England*, and in the greatest part of Europe, a great drought, which may be inferred from the failure of the springs, in the abatement of the *fresh water* in all its usual currents and reservoirs, which are the best measure of the quantity of moisture falling from the *clouds*. What is most generally taken notice of in the accounts I have seen from *Germany*, *France*, and some other places, was, that the *air* in the beginning of winter, especially in November, was more than usually filled with thick and frequent fogs, the *matter* of which was not precipitated upon the earth in rain, snow, or any other fruits of the air. *Fogs* are so usual in *this* country in November, that there was nothing particular observed about them that I know. But there was hardly anything fell from the *clouds* during the month of November, except a very small quantity of snow, attended with a frost of no long duration; and this was all the winter we had. In the *northern* parts of France, there was a very small quantity of snow, which lasted from their 15th and our 4th of November, till after Christmas. This was succeeded by southerly winds and stinking fogs, during which there was observed by some chirurgeons a great disposition in wounds to mortify. *(o)* Both before and during the continuance of the disease in England, the air was warm, beyond the usual temper

(*m*) Medical Notes, by H. Holland, M.D., pp. 198—9.
(*n*) The mortality of females is taken in these comparisons extending from 1801—37. The male population—on account of the military—could not be so accurately determined.
(*o*) The late King of Denmark it is said had phlebitis; is not there some liability to this disease during an influenza epidemic?

of the season, with great quantity of sulphureous vapours, producing great storms of wind from the south-west, and sometimes lightning without thunder.

XIII. "As to the times of the invasion of the disease, they were different in different countries. It invaded Saxony and the neighbouring countries in Germany, about the 15th of November, and lasted in its vigour till the 29th of the same month. It was earlier in Holland than in England; earlier in Edinburgh than in London. It was in New England before it attacked Britain; in London before it reached some other places westward, as Oxford, Bath, &c., and as far as I can collect from accounts, it invaded the northerly parts of Europe before the southerly; it lasted in its vigour in London, from about the middle of January, 173$\frac{2}{3}$, for about three weeks;*p*—the bill of mortality from Tuesday the 23rd to Tuesday the 30th of January, contained in all 1588, being higher than any time since the plague. It began in Paris about the beginning of their February, or the 21st of our January, and lasted till the beginning of their April, or the 21st of our March, and I think its duration was longest in the southerly countries. It raged in Naples and the southerly parts of Italy, in our March. The disease in travelling from place to place, did not observe the direction, but went often contrary to the course of the winds.

XIV. "The uniformity of the symptoms of the disease in every place was most remarkable. A small rigor or chilliness, succeeded with a fever of a duration, (in such as recovered), seldom above three days. This fever was attended with headache, sometimes pains in the back, thirst in no great degree, a catarrh or thin defluxion, occasioning sneezing, a coryza, or running at the nose, a cough, with expectoration of a thin pituite at first, and afterwards of a viscous matter, in which if there was observed a clear oily matter, it proved generally the case to be mortal, for this clear matter was purulent. These were the most common symptoms. But a great many during that season were affected with a spitting of blood, pleurisies, and inflammation of the lungs, dangerous and often mortal—in some places, particularly in France, the fever after six or seven days ended in miliary eruptions; in Holland often in imposthumations of the throat; in all the blood was sizy, and everywhere the disease was fatal to aged people. What was observable was, that the fever left a debility and dejection of appetite and spirits, much more than in proportion to its strength or duration, and the cough outlasted the fever in some more than six weeks or two months.

XV. "There was, during the whole season, a great run of hysterical, hypochondriacal and nervous distempers; in short all the symptoms of relaxation. These symptoms were so high in some as to produce a sort of fatuity or madness in which, for some hours together they would be seized with a wandering of their senses, mistaking their common affairs; at same time they had not any great degree of fever to confine them to their beds; but in several who were thus affected, the urine was observed often to change from pale to turbid alternately, so that there was some fever, though I did not observe nor hear that the bark was effectual, but the saline febrifuge draughts had generally, a most surprising good effect. Since this disease has been over, the air has continued to be particularly noxious in diseases which affect the lungs, and for that reason occasioning a great and unusual mortality of the measles, at the rate of forty in the week, from which one has reason to expect some specialties in the diseases of the succeeding season.

XVI. "The remedies commonly successful in this epidemical catarrhous fever, were bleeding, sweating, promoted by watery diaphoretics, blisters, and the common pectoral medicines; and what I observed before, febrifuge draughts of salt of wormwood, juice of lemon, &c. I have not particulars enough to enable me to enter into the etiology of this distemper.

XVII. "It was a matter of fact, that there was a previous ill constitution of the air noxious to animal bodies. In autumn, and long afterwards, a madness among dogs; the horses were seized with the catarrh before mankind; and a gentleman averred to me, that some birds, particularly sparrows, left the place where he was during the sickness.

XVII. "The previous great drought as has been observed before must have been particularly hurtful to mankind: great droughts exert their effects after the surface of the earth is again opened by moisture; and the perspiration of the ground, which was long suppressed is suddenly restored. It is probable that the earth then emits several new effluvia hurtful to human bodies; that this appeared to be the case by the thick and stinking fogs which succeeded the rain that had fallen before.

XIX. "It is likewise evident that these effluvia were not of any particular or mineral nature, becausc they were of a substance that was common to every part of the surface of the earth; and therefore one may conclude that they were watery exhalations, or at least such mixed with other exhalable substances that are common to every spot of ground.

XX. "Lastly it is agreeable to experience that watery effluvia, are hurtful to the glands of the windpipe and the lungs, and productive of catarrhs."—ARBUTHNOT upon THE AIR, and its effect upon the Human Body, 1733, chap. 7, page 193. *Tonson, Strand.*

p All the dates are in old style: January 15, 1732, is therefore January 26th, 1733, new style, &c. The French adopted the Gregorian reform of the calendar in 1582.

Annual *rate* of Mortality per cent., in the Districts of London, deduced from the Deaths in the last 6 Weeks of the Year 1847, compared with the rate of Mortality of the 7 Years, 1838—44.

DISTRICTS	Annual Mortality per cent. during the 7 years 1838—44. ‡	Annual Mortality per cent. during 6 weeks 1847 †	DISTRICTS	Annual Mortality per cent. during the 7 years 1838—44	Annual Mortality per cent. during 6 weeks 1847
LONDON	2.522	4.579			
Kensington and Chelsea	2.337	*3.935	Shoreditch	2.508	4.953
St. George, Hanover Square	1.816	*3.204	Bethnal Green	2.387	4.990
Westminster	2.598	*5.172	Whitechapel	2.904	*6.630
St. Martin in the Fields	2.400	*3.694	St. George in the East	2.887	6.881
St. James, Westminster	2.117	3.491	Stepney	2.417	4.019
Marylebone	2.272	4.238	Poplar	2.408	3.858
Pancras, with Hampstead	2.222	*4.562	St. Saviour and St. Olave	2.847	*7.537
Islington	1.996	4.196	Bermondsey	2.639	5.363
Hackney	1.969	3.523	St. George, Southwark	2.669	5.492
St. Giles	2.690	4.709	Newington	2.320	4.848
Strand	2.437	*3.878	Lambeth	2.328	3.866
Holborn	2.369	5.595	Camberwell	1.971	*3.872
Clerkenwell	2.418	4.117	Rotherhithe	2.767	6.319
St. Luke	2.761	*4.100	Greenwich	2.382	*4.852
East and West London) City of	2.848	*6 419	Wandsworth	1.975	2.948
City of London Union) London	2.137	*3.872	Lewisham	1.726	2.504

* These districts contain hospitals; or the workhouses interfere with the result.
The workhouses of the City of London district are in Peckham, Stepney, and Norwood, &c.

‡ The Mortality here given, is the mean of the Mortality of Males and Females.

† No correction has been made for the deaths in hospitals in this calculation.

Comparative *Annual rate* of Mortality per cent., in the healthiest and unhealthiest districts of London, during the seven years, 1838—44, and the last six weeks of 1847.

ANNUAL RATE OF MORTALITY IN THE LEAST UNHEALTHY DISTRICTS.				ANNUAL RATE OF MORTALITY IN THE UNHEALTHIEST DISTRICTS.			
DISTRICTS.	During the 7 years 1838—44.	During the last 6 weeks of 1847.	Excess in the 6 weeks of 1847.	DISTRICTS	During the 7 years 1838—44.	During the last 6 weeks of 1847.	Excess in the 6 weeks of 1847.
Lewisham	1.726	*2·504	·778	Holborn	2·369	5·595	3·226
Hackney	1·969	3·523	1.554	Bermondsey	2·639	5·363	2·724
Wandsworth	1·975	2.948	.973	Rotherhithe	2·767	6·319	3·552
Islington	1·996	4.196	2·200	St. Giles	2·690	4·709	2·019
St. James, Westmr.	2·117	3.491	1.374	St. George, Southwark	2·669	5·492	2·823
Newington, (Surrey)	2·320	4.848	2·528	St. George in the East	2·887	† 6·881	3·994
Mean	2·017	3·585	1·568	Mean	2·670	5·727	3·057
Corrected for Deaths in Hospitals	2·017	3·803	1·786	Mean	2·670	6·075	3·405

* Lewisham corrected for deaths in hospitals, 2·656; it is probable, however, that few persons belonging to Lewisham District died in the London Hospitals.

† St. George in the East corrected for deaths in hospitals, 7·299.

DEATHS IN THE DISTRICTS OF LONDON FOR THE WEEKS ENDING

Population, 1841.	DISTRICTS	1847													1848			
		Oct. 2nd.	*Oct. 9th.*	*Oct. 16th.*	*Oct. 23rd.*	*Oct. 30th.*	*Nov. 6th.*	*Nov. 13th.*	*Nov. 20th.*	*Nov. 27th.*	*Dec. 4th.*	*Dec. 11th.*	*Dec. 18th.*	*Dec. 25th.*	*Jan. 1st.*	*Jan. 8th.*	*Jan. 15th.*	*Jan. 22nd.*
1,948,425*	London	1143	1022	953	967	945	1052	1098	1086	1677	2454	2416	1946	1247	1599	1364	1457	1401
300,711	West Districts	153	141	136	151	122	151	173	180	179	300	332	273	188	256	167	201	169
375,971	North Districts	194	199	163	170	191	207	215	167	267	422	482	415	260	271	257	244	252
373,653	Central Districts	207	160	179	171	170	189	210	205	319	530	458	314	195	278	213	256	274
392,444	East Districts	273	254	216	215	192	221	221	262	504	602	463	371	240	389	334	360	320
501,190	South Districts	316	268	259	260	270	284	279	272	408	600	681	573	364	405	393	396	386
74,779	Kensington	37	39	41	40	36	44	46	47	43	61	91	57	51	50	49	55	36
40,179	Chelsea	24	20	26	26	16	34	26	22	31	39	57	52	49	52	31	24	30
66,552	St. George, Hanover-sq.	24	20	15	24	31	22	23	36	32	44	56	44	33	60	24	46	32
56,712	Westminster	35	32	28	29	20	26	44	43	43	99	66	71	30	58	40	41	40
25,091	St. Martin-in-the-Fields	20	15	12	10	7	11	17	18	11	27	25	15	14	16	9	12	12
37,398	St. James, Westminster	13	15	14	22	12	14	17	14	19	30	37	34	11	20	14	23	19
138,164	Marylebone	64	62	60	58	62	76	80	52	103	141	155	156	87	85	91	72	88
139,856	Pancras with Hampstead	91	88	69	74	73	86	88	73	94	164	210	150	106	120	102	103	98
55,690	Islington	25	26	21	23	27	25	34	28	40	80	74	73	40	42	39	33	42
42,261	Hackney	14	23	13	15	29	20	13	14	30	37	43	36	27	24	25	36	24
54,292	St. Giles	29	21	27	26	25	26	25	28	49	49	64	61	28	45	38	35	47
43,598	Strand	31	21	23	16	18	12	23	19	35	44	37	32	15	37	21	27	33
44,461	Holborn	27	20	20	18	21	34	34	30	28	93	56	47	28	37	21	41	27
56,756	Clerkenwell	25	15	30	25	31	22	39	33	42	77	75	47	31	31	26	40	44
49,829	St. Luke	23	35	24	22	19	17	30	25	35	68	52	26	31	31	40	25	29
39,655	East London	18	16	19	24	19	28	26	29	51	75	48	26	15	36	26	35	32
29,142	West London	30	19	21	23	15	31	17	21	39	64	61	40	25	34	24	22	39
55,920	City of London	24	13	15	17	22	19	16	20	40	60	65	35	22	27	17	31	23
83,432	Shoreditch	43	51	41	65	39	42	36	50	85	111	118	94	47	79	79	72	69
74,088	Bethnal Green	45	41	34	38	29	37	33	48	103	124	90	78	38	43	54	64	53
71,765	Whitechapel	67	62	45	36	48	54	69	53	113	134	88	78	70	98	59	67	61
41,350	St. George-in-the-East	32	34	38	17	27	38	23	37	84	82	54	43	27	49	36	39	44
90,687	Stepney	64	37	36	39	40	35	41	56	98	115	88	54	39	87	68	86	68
31,122	Poplar	22	29	22	20	9	15	19	18	21	36	25	24	19	33	38	32	25
32,975	St. Saviour	17	31	15	19	15	15	24	24	28	57	60	43	24	29	29	15	33
18,479	St. Olave	36	18	19	22	17	20	14	21	37	39	38	21	35	36	20	33	23
34,947	Bermondsey	21	29	16	21	34	26	22	33	35	49	66	36	21	32	20	27	40
46,644	St. George, Southwark	18	28	32	33	27	31	43	30	55	65	64	66	32	40	35	44	41
54,606	Newington	19	25	19	23	33	28	33	26	40	66	92	65	37	47	51	53	39
115,888	Lambeth	50	57	59	53	73	63	52	63	83	117	135	128	66	84	92	88	82
39,868	Camberwell	18	15	28	19	16	32	10	12	30	52	51	38	31	19	29	34	32
13,917	Rotherhithe	11	7	7	7	5	8	8	8	19	32	24	12	6	12	9	9	8
80,997	Greenwich	98	36	43	40	36	41	55	34	59	98	105	112	77	59	72	48	43
39,855	Wandsworth	24	15	12	10	9	10	7	13	16	19	31	32	22	32	29	31	32
23,014	Lewisham	4	7	9	13	5	10	11	8	6	6	15	20	13	15	7	14	13

* Includes 1366 Men on River, and 3090 Police on Duty.

DEATHS in LONDON from INFLUENZA in each Week of the Eight Years 1840—7.

WEEKS	YEARS							
	1840	1841	1842	1843	1844	1845	1846	1847
1st	..	..	2	1	8	3	2	8
2nd	3	2	..	..	3	4	1	4
3rd	3	2	1	1	3	3	2	10
4th	3	2	2	..	4	3	2	7
5th	..	1	2	1	1	3	2	8
6th	..	2	6	2	5	1	..	4
7th	4	4	4	4	9	3	1	4
8th	..	12	4	3	4	3	..	6
9th	1	16	4	3	6	1	2	1
10th	2	29	2	1	7	3	2	4
11th	3	27	..	3	3	1	3	..
12th	1	24	1	6	4	3	4	5
13th	1	21	3	2	9	3	1	2
14th	2	13	3	1	4	1	1	4
15th	..	9	1	3	6	1	4	4
16th	..	8	2	1	2	1	1	4
17th	2	3	1	1	3	1	..	1
18th	..	4	2	1	1	2	1	3
19th	..	4	1	..	3	..	1	..
20th	..	4	..	2	2	3	1	1
21st	2	3	3	..	4	..	2	1
22nd	1	..	3	..	..	..	3	1
23rd	2	2	..	1	1	..	..	..
24th	1	2	..	5	1	..	3	..
25th	1	5	1	3	1	1	2	3
26th	3	..	2	3	..	1	2	1
27th	1	1	2	4	2	..	2	1
28th	1	1	1	3	..	..	..	..
29th	1	..	2	1	..	1	..	2
30th	2	2	1	1	1	1	1	..
31st	3	1	1	1	..	..	1	1
32nd	1	1	..	3	..	..	..	..
33rd	1	..	3	1	1	1	..	..
34th	1	..	1	..	..	1	..	..
35th	..	..	..	1	..	..	1	..
36th	1	1	..	1	1	1	..	1
37th	..	1	1	..	3	..	..	..
38th	..	..	1	1	..	1	1	1
39th	..	..	..	..	..	2	..	..
40th	..	2	..	1	1	..	1	2
41st	..	..	..	1	3	..	..	1
42nd	1	2	1	1	3	..	1	..
43rd	..	1	..	2	1	1	..	..
44th	2	..	1	6	2	1	1	1
45th	1	..	2	3	4	3	6	2
46th	..	3	4	4	2	1	4	4
47th	..	2	1	8	5	3	5	4
48th	..	..	2	1	2	2	9	36
49th	4	1	..	5	1	3	8	198
50th	3	1	1		4	2	11	374
51st	6	..	..	2	3	3	9	270
52nd	5	1	3	4	1	1	11	142
53rd	..	..	..	..	..	..	..	127
TOTAL	69	220	78	104	134	73	115	1253

Note.—Wandsworth was included in London in 1844, and Lewisham and Hampstead in 1847.

DEATHS in LONDON at Different Ages from all Causes. 1847.

Weeks ending	MALES—AGES.																		
	0	1	2	3	4	0	5	10	15	25	35	45	55	65	75	85	95	100	?	All Ages
November 6	113	48	35	21	22	240	26	10	12	35	39	40	46	52	19	8	2	..	..	529
,, 13	108	60	39	24	24	255	33	10	7	40	39	31	37	47	36	13	1	..	..	549
,, 20	104	58	31	31	14	238	29	9	16	41	47	34	36	37	41	14	1	..	1	541
,, 27	160	81	60	36	22	359	34	11	15	36	60	69	78	60	68	27	2	..	..	819
December 4	191	130	67	39	27	454	46	14	23	68	65	89	101	117	108	50	6	..	..	1141
,, 11	198	146	81	47	23	495	39	20	16	62	75	84	94	110	123	49	8	..	..	1175
,, 18	144	102	51	53	22	372	44	15	15	65	76	80	82	96	79	51	5	..	..	980
,, 25	114	70	43	24	18	269	24	12	17	39	52	55	44	55	37	15	1	..	..	620
January 1	181	81	42	42	26	372	37	10	18	60	66	69	78	52	65	17	..	..	1	845
Total from Nov. 21 to Jan. 1, inclusive ..	988	610	341	241	138	2321	224	82	104	330	394	446	477	410	480	209	22	..	1	5580

Weeks ending	FEMALES—AGES.																		
	0	1	2	3	4	0	5	10	15	25	35	45	55	65	75	85	95	100	?	All Ages
November 6	95	45	33	22	20	215	35	15	15	35	40	23	32	43	46	22	2	..	..	523
,, 13	90	55	24	21	14	204	25	19	13	49	40	40	42	55	44	12	1	1	..	549
,, 20	95	59	46	27	20	247	33	12	7	38	38	42	34	45	31	13	1	..	..	542
,, 27	123	93	54	35	13	318	34	15	20	37	61	57	85	81	105	41	14	..	..	858
December 4	149	136	78	45	32	440	49	9	13	59	97	85	112	141	203	93	2	..	..	1313
,, 11	153	107	82	39	21	402	47	13	30	67	80	82	108	141	175	90	6	..	..	1241
,, 18	126	89	60	37	23	335	37	15	8	46	65	49	71	131	137	56	9	..	1	966
,, 25	75	73	42	21	16	227	30	12	11	38	51	45	39	65	69	34	5	..	1	627
January 1	145	65	35	27	15	287	33	11	23	50	59	69	49	56	81	31	2	..	..	754
Total from Nov. 21 to Jan. 1, inclusive ..	771	563	351	204	120	2009	230	75	105	297	13	387	467	618	770	348	38	..	2	5759

TABLE
OF THE
DEATHS

In 117 of the Districts of England (including the principal Towns): shewing the Number of Deaths Registered in the Quarters ending December 31st.

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending December 31st — Years								
		1839	1840	1841	1842	1843	1844	1845	1846	1847
.....	6612800	41740	44186	39292	39662	42608	44080	39291	53093	57925
xclusive } don .... }	4664589	30028	31167	28188	27708	28513	30261	27453	39872	38320
Aggregate Deaths in parts of the 11 Divisions of England.										
on	1948211	11712	13019	11104	11954	14095	13819	11838	13221	*19605
n Eastern..	218181	1150	1209	1143	1236	1230	1327	1122	1468	1374
n Midland .	155225	873	834	958	690	956	922	683	1121	932
ern.....	128921	741	811	683	769	694	887	633	858	758
n Western .	327869	1583	1885	1856	1846	1954	1991	1503	2069	1705
ern	776002	4557	5159	4888	4701	4658	5122	4210	6052	6743
h Midland.	234771	1713	1687	1271	1510	1450	1484	1256	1605	1606
h Western.	1530460	11399	11508	10027	10153	10341	11050	10523	16175	15481
.....	691131	4412	4376	4015	3792	4039	4318	4218	5660	5364
hern	328902	2213	2154	1997	1707	1805	1652	1921	3027	2712
h	273127	1387	1544	1350	1304	1386	1508	1384	1837	1645
Districts.										
ndon										
stricts	301326	1594	1890	1525	1636	1944	1987	1694	1826	*2735
istricts....	376396	1992	2358	2016	2219	2443	2405	1961	2413	3623
Districts ..	374759	2426	2493	2086	2289	2738	2491	2260	2390	3585
tricts	393247	2649	2820	2442	2632	3199	2999	2638	2901	4423
istricts....	502483	3051	3458	3035	3178	3771	3937	3285	3691	5239
stern ision										
e	32310	178	169	175	211	208	204	175	262	205
.....	46742	236	240	244	395	282	302	251	375	300
Vight.. ...	42547	168	215	210	137	197	235	167	201	179
Island	53036	340	322	324	286	338	341	347	380	476
ter	23044	115	139	94	95	132	152	96	163	124
.....	20502	113	124	96	112	73	93	86	87	90
dland ision										
s	17051	90	83	88	62	74	94	75	91	76
e	34150	177	174	176	151	192	198	135	182	170
.....	19701	101	88	150	95	85	103	90	189	96
pton	28103	177	160	204	124	174	181	140	181	205
.....	31767	185	167	187	154	220	203	131	327	245
ge	24453	143	162	153	104	211	143	112	151	140
tern ision										
r	17790	118	105	103	112	114	122	85	152	127
.....	25254	134	137	129	117	147	135	145	212	167
.....	61846	365	426	336	417	279	466	304	361	319
h	24031	124	143	115	123	154	164	99	133	145
estern ision										
.....	22130	121	114	122	126	132	109	102	137	129
er.....	23380	81	101	112	108	146	95	95	135	101
.....	31333	138	171	277	166	295	194	204	267	175
as.....	47105	206	217	278	179	223	217	183	276	177
h	36527	158	225	181	284	227	279	180	306	306
.....	48062	228	259	241	356	219	311	184	265	197
e	50100	225	295	255	279	234	366	214	269	191
.....	69232	426	503	390	348	478	420	341	414	429
stern ision										
.....	64298	518	578	419	420	518	523	363	471	481
.....	66233	318	444	322	330	395	385	378	403	419
.....	38920	148	183	162	185	191	193	171	227	174
am	40221	207	197	248	244	197	222	194	221	170
.....	34427	168	214	159	255	194	187	164	199	136

Parts of Divisions and Districts	Population 1841	Deaths Registered in the Quarters ending December 31st — Years								
		1839	1840	1841	1842	1843	1844	1845	1846	1847
Shrewsbury	21529	123	147	127	117	135	166	99	151	158
Worcester	27130	162	137	157	195	170	150	149	198	176
Kidderminster	29408	119	200	135	159	145	189	158	145	150
Dudley	86028	524	493	686	519	414	697	475	768	963
Walsall	34274	206	317	225	202	150	179	225	300	308
Wolverhampton ..	80722	437	651	560	411	474	489	463	630	815
Wolstanton	32669	191	189	202	255	179	209	171	327	268
Birmingham	138187	985	945	920	872	998	964	777	1341	1795
Aston	50928	252	314	301	240	307	325	230	446	520
Coventry	31028	199	150	265	297	191	244	193	225	210
N. Midland Division										
Leicester	50932	367	431	299	407	343	387	354	460	345
Lincoln	36110	212	236	200	156	210	160	158	197	215
Nottingham	53080	520	428	306	382	357	382	304	353	466
Basford	59634	364	347	267	341	280	345	252	373	270
Derby.....	35015	250	245	199	224	260	210	188	222	310
N. Western Division										
Stockport	85672	547	623	458	532	534	474	437	793	571
Macclesfield	56018	457	379	339	308	307	344	293	425	443
Gt. Boughton, inc. Chester	49085	302	382	312	255	257	263	235	392	270
Liverpool	223054	1960	2247	1995	1723	1855	2130	1982	2735	3725
West Derby, (adj. Liverpool	88652	497	691	561	652	625	814	673	1111	1122
Blackburn	75091	700	431	376	359	462	577	433	853	606
Preston	77189	444	661	480	478	459	429	551	968	636
Rochdale	60577	428	435	313	338	360	329	395	492	455
Bury	77496	469	504	465	409	439	445	439	717	594
Bolton	97519	677	748	576	732	624	621	821	990	844
Wigan..... ..	66032	619	481	392	336	523	371	401	675	552
Prescot	43739	331	236	243	242	223	237	289	510	365
Chorlton.....	93736	582	520	649	583	658	710	692	985	944
Manchester	192408	1634	1520	1474	1609	1438	1652	1413	2318	2210
Salford	70228	590	483	476	532	517	525	451	726	623
Ashton	173964	1162	1167	918	1065	1060	1129	1018	1485	1521
York Division										
Sheffield..	85076	769	644	644	456	546	599	527	805	734
Huddersfield	107140	545	546	487	444	478	537	574	960	708
Halifax	109175	620	562	512	621	562	596	695	671	603
Bradford.....	132164	860	791	658	782	809	833	1039	1089	895
Leeds & Hunslet‡	168667	974	1194	1170	981	1070	1103	891	1389	1413
Hull	41130	305	370	287	257	317	314	261	404	489
York	47779	339	269	257	251	257	336	231	342	522
Northern Division										
Sunderland	56226	437	396	372	294	307	269	378	358	496
Gateshead	38747	258	256	270	197	261	214	215	426	293
Tynemouth	55625	310	308	337	321	276	267	325	498	326
Newcastle-on-Tyne	71850	623	516	525	392	423	374	434	888	904
Carlisle	36084	186	326	181	193	230	204	183	327	279
Cockermouth.....	35676	160	181	177	149	159	164	173	262	259
Kendal	34694	239	171	135	161	149	160	213	268	155
Welsh Division										
Abergavenny.....	50834	287	311	300	221	277	264	235	332	311
Pontypool	25037	134	108	97	151	89	124	168	149	153
Merthyr Tydfil	52864	310	378	288	261	372	459	334	388	483
Newtown	25958	113	145	118	103	99	97	123	146	114
Wrexham	39542	189	243	184	211	209	181	177	348	217
Holywell.....	40787	233	205	217	194	196	228	184	268	209
Anglesey	38105	121	154	146	163	144	155	163	206	158

The last Quarter in London ended January 1st, 1848, and contained the deaths in 14 weeks: deducting one week (the 6th in the Quarter) for the sake of comparison with the corresponding Quarter of former Years, the number of deaths in the West, North, Central, East, and South Districts, will be respectively, 2584, 3416, 3396, 4202, 4955. All London 18553.

The Mortality of the Districts of Wandsworth, and Lewisham, and Sub-District of Hampstead, is included in the above Table, in each of the nine Years, though the deaths in Wandsworth did not appear in the Weekly Metropolitan Returns till 1844; nor those of Lewisham and Hampstead till 1847.

The former District of Leeds is now divided into the Districts of *Leeds* and *Hunslet*, both included in the present Return.

A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES,

Registered in the Eight Quarters ending December 1840-41-42-43-44-45-46-47.

CAUSES OF DEATH	December Quarters YEARS 1840	1841	1842	1843	1844	1845	1846	1847
All Causes	13019	11104	11954	14095	13819	11838	13221	19605
Specified Causes	12818	10926	11780	13826	13619	11631	12986	19571
I.—Zymotic Diseases	2464	2023	2074	2946	2991	2724	2198	5788
Sporadic Diseases:—								
II.—Dropsy, Cancer, and other Diseases of uncertain or variable Seat	1509	1381	1418	1418	1338	1069	1272	1640
III.—Diseases of the Brain, Spinal Marrow, Nerves and Senses	1962	1731	1844	2080	2001	1727	1959	2150
IV.—Diseases of the Lungs and of the other Organs of Respiration	4154	3367	3810	4440	4265	3567	4313	6101
V.—Diseases of the Heart and Blood Vessels	289	258	290	331	474	417	572	573
VI.—Diseases of the Stomach, Liver, and other Organs of Digestion	791	825	766	1002	854	875	1042	1235
VII.—Diseases of the Kidneys, &c.	62	54	95	89	101	140	141	190
VIII.—Childbirth, Diseases of the Uterus, &c.	162	112	144	143	173	141	227	222
IX.—Rheumatism, Diseases of the Bones, Joints, &c.	76	59	81	70	94	89	125	139
X.—Diseases of the Skin, Cellular Tissue, &c.	15	17	15	26	16	35	50	47
XI.—Old Age	1000	798	918	980	898	519	651	957
XII.—Violence, Privation, and Intemperance	334	301	325	301	414	328	436	529
I.—Small Pox	709	75	108	114	571	106	42	372
Measles	356	409	346	456	385	927	105	881
Scarlatina	419	181	522	718	872	269	322	747
Hooping Cough	287	652	309	468	277	557	368	426
Croup	102	128	112	127	102	82	65	116
Thrush	54	62	59	87	52	46	61	52
Diarrhœa	62	112	87	268	129	199	331	400
Dysentery	16	20	49	103	34	25	43	91
Cholera	6	3	13	14	5	11	15	12
Influenza	23	13	15	40	32	20	66	1161
Ague	5	3	8	6	14	3	6	12
Remittent Fever	5	1	4	8	10	12	17	31
Typhus	310	291	359	460	385	358	619	1279
Erysipelas	107	64	78	67	106	77	106	176
Syphilis	3	7	4	9	17	31	32	32
Hydrophobia	..	2	1	1	..	1	..	..
II.—Inflammation	90	65	73	40	8	..	..	..
Hæmorrhage	41	29	42	49	40	20	30	31
Dropsy	510	453	441	386	337	134	170	198
Abscess	49	44	28	30	30	20	18	22
Noma	..	..	..	..	..	2	3	11
Mortification	54	54	49	65	61	27	47	43
Purpura	3	2	4	4	6	8	5	17
Scrofula	19	23	32	37	37	65	71	84
Cancer	89	97	117	144	157	206	217	209
Tumor	19	31	17	8	4	1	2	5
Gout	10	12	22	13	10	18	14	17
Atrophy	83	80	95	172	164	186	255	390
Debility	314	295	244	270	281	246	301	336
Malformations	12	5	17	30	17	54	46	52
Sudden Deaths	216	191	237	170	186	82	93	225
III.—Cephalitis	142	122	148	152	160	142	148	154
Hydrocephalus	437	386	372	471	372	386	342	408
Apoplexy	250	239	224	249	311	272	347	349
Paralysis	230	211	198	235	235	213	267	307
Convulsions	695	582	703	758	699	450	548	592
Tetanus	8	3	1	7	4	6	5	5
Chorea	1	1	1	1	6	..	1	1
Epilepsy	60	43	49	36	54	68	77	90
Insanity	12	11	14	22	14	30	18	26
Delirium Tremens	22	27	16	21	25	33	42	45
Disease of Brain, &c.	105	106	118	128	121	127	164	173

CAUSES OF DEATH	December Quarters YEARS 1840	1841	1842	1843	1844	1845	1846
IV.—Laryngitis	9	6	6	14	17	27	33
Quinsey	16	20	23	26	35	10	14
Bronchitis	151	140	213	286	394	591	892
Pleurisy	24	29	20	22	30	43	43
Pneumonia	1455	948	1314	1729	1405	1131	1101
Hydrothorax	65	45	49	80	86	48	46
Asthma	458	294	278	320	366	190	313
Phthisis or Consumption	1766	1708	1700	1771	1676	1382	1685
Disease of Lungs, &c.	210	177	207	192	256	145	186
V.—Pericarditis	10	4	9	14	35	22	26
Aneurism	16	6	7	9	10	19	16
Disease of Heart, &c.	263	248	274	308	429	376	530
VI.—Teething	217	232	173	270	171	113	103
Gastritis	209	220	205	235	15	10	28
Enteritis					184	114	112
Peritonitis	13	13	25	20	29	45	55
Tabes Mesenterica	59	74	64	136	101	162	177
Worms	8	5	4	11	11	10	5
Ascites	9	13	8	21	24	29	26
Ulceration (of Intestines, &c.)	23	21	18	32	20	35	36
Hernia	23	25	27	21	27	22	47
Colic or Ileus	19	33	37	33	29	16	34
Intussusception	6	3	3	6	8	6	9
Stricture	7	4	6	5	6	12	8
Hæmatemesis	4	2	5	6	9	15	13
Disease of Stomach, &c.	57	26	63	80	52	71	101
Disease of Pancreas	..	1	..	..	1	1	3
Hepatitis	22	6	14	17	23	54	50
Jaundice	20	36	29	24	34	29	37
Disease of Liver, &c.	95	111	84	83	108	127	194
Disease of Spleen	..	..	1	2	2	4	4
VII.—Nephritis	8	8	3	10	5	11	1
Ischuria	2	1	1	3	1	..	1
Diabetes	6	3	3	5	10	12	3
Cystitis	5	5	8	3	4	6	3
Stone	1	3	4	1	9	11	8
Stricture	5	4	16	11	12	20	18
Disease of Kidneys, &c.	35	30	60	56	60	80	107
VIII.—Childbirth	116	88	107	95	121	95	163
Paramenia	5	3	3	4	..	7	6
Ovarian Dropsy	1	1	3	5	9	8	7
Disease of Uterus, &c.	40	20	31	39	43	31	51
IX.—Arthritis	1	..	..	2	..	3	3
Rheumatism	35	31	47	27	43	46	67
Disease of Joints, &c.	40	28	34	41	51	40	55
X.—Carbuncle	1	..	..	4	1	3	1
Phlegmon	1	3	..	1	2	1	9
Ulcer	7	10	3	8	8	15	15
Fistula	3	3	4	7	1	3	8
Disease of Skin, &c.	3	1	8	6	4	13	17
XI.—Old Age	1000	798	918	980	898	519	651
XII.—Intemperance	9	4	8	8	10	23	24
Privation	9	10	6	5	10	6	15
Violent Deaths	316	287	311	288	394	299	397
† Causes not specified	201	178	174	269	200	207	235

* The mortality of the district of Lewisham, and sub-district of Hampstead, was included in the Metropolitan Returns at the commencement of 1847, for the first time; this table the deaths in Lewisham and Hampstead for the December quarter in the previous years (1840-6), are included under the head of causes not specified.

† Under the head of *sudden deaths* are classed not only deaths described as sudden, of which the cause has not been ascertained or stated; but also all deaths returned the coroner in vague terms, such as "found dead," "natural causes," &c. &c.

DEATHS REGISTERED in LONDON in the 13 Weeks ending SEPTEMBER, 25th, 1847.

WEEKS ENDING	AGES				
	0—15	15—35	35—55	55 & up.	All Ages
July, 3rd	376	160	174	223	933
,, 10th	423	106	145	208	882
,, 17th	432	150	149	213	944
,, 24th	444	133	125	203	905
,, 31st	517	117	156	174	964
Aug. 7th	541	132	138	187	998
,, 14th	601	128	135	244	1108
,, 21st	560	114	151	232	1057
,, 28th	554	131	153	246	1084
Sept. 4th	514	145	171	221	1051
,, 11th	555	148	143	194	1040
,, 18th	550	177	184	258	1169
,, 25th	517	145	159	231	1052
TOTAL	6584	1786	1983	2834	13187
Deaths which would have been registered if the mortality had been the same as in Dorsetshire, Sept. quarters, 1838—44.	3078	1709	1367	1955	8109
Excess of Mortality in London	3506	77	616	879	5078

COMPARATIVE METEOROLOGY OF THE AUTUMN QUARTERS OF THE YEARS 1845, 1846, & 1847.

(Deduced from the Greenwich Observations.)

Quarters ending	Years	Mean height of the Barometer, from 936 observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS										In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'clock.		Difference between the dew point temperature and air temperature			Difference between the mean temperature of the quarter, and the mean temperature of the same quarter on an average of 25 years	WIND			The mean weekly amount of Horizontal movement of the air	Mean amount of Cloud, 0-10	Rain in inches (91 days)
			Highest during the quarter	Lowest during the quarter	Mean: Of the Highest on each day, from 78 observations	Mean: Of the Lowest on each day, from 78 observations	Mean: Difference in degrees	Mean of 936 observations	Dew Point: Mean of 936 results	Self-Registering: Highest in the sun: During the quarter	Highest in the sun: Mean of 91 observations	Lowest on the grass: During the quarter	Lowest on the grass: Mean of 91 observations	MEAN: Of the highest on each day from 91 observations.	MEAN: Of the lowest on each day from 91 observations.	Mean of 936 differences	Mean of the greatest on each day, 78 observations	Mean of the least on each day, 78 observations		General direction	Greatest pressure in the quarter	Mean for the quarter			
Dec. ..	1845	29.767	67.1	28.3	51.6	40.4	11.2	46.1	42.5	84.8	59.9	15 0	33.4	47.4	46.4	3.6	7.4	0.9	+0.9	..	15.0	0.5	1107	6.2	5.42
	1846	29.621	65.8	19.8	48.5	39.7	8.8	44.2	41.0	86.5	60.7	9.0	33.0	..	45.8	3.1	6.7	0.8	—1.3	..	10.5	0.3	1003	7.3	8.16
	1847	29.815	73.0	26.5	52.7	42.1	10.6	47.4	44.0	—	—	18.0	36.1	48.2	47.6	3.4	7.1	1.0	+2.3	..	12.5	0.3	950	7.6	5.19

DEATHS in LONDON from all Causes (exclusive of Violent and Sudden Deaths), and from Influenza, in the 13 Weeks of the Autumn Quarters 1845, 1846, and 14 Weeks of 1847.

Number of Weeks		1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL
Deaths from all causes, exclusive of Violent and Sudden Deaths	1845	801	759	750	763	905	917	918	883	938	928	947	918	887	..	11,314
	1846	858	872	798	862	938	912	889	837	918	1020	1111	1214	1214	..	12,543
	1847	999	985	933	943	925	1034	1059	1060	1641	2419	2367	1862	1178	1486	18,891
Deaths from Influenza	1845	..	..	..	1	1	3	1	3	2	3	2	3	1	..	20
	1846	1	..	1	..	1	6	4	5	9	8	11	9	11	..	66
	1847	2	1	..	..	1	2	4	4	36	198	374	270	142	127	1,161
Mean Temperature..	1845	55.0	47.7	52.9	45.9	48.9	47.2	44.8	45.5	46.1	42.4	39.2	43.6	40.1	..	46.1
	1846	53.5	56.4	50.5	49.1	43.2	49.1	44.1	47.8	45.8	32.0	35.9	29.9	36.3	..	44.2
	1847	51.7	53.0	54.8	53 5	49.8	50.5	49.8	40.7	46.5	47.9	46.7	48.0	35.4	34.8	47.4

DEATHS in Nine Quarters of the Years 1845—1847.

	Liverpool	Manchester	Birmingham
1845—December	1982	1413	777
1846—March	1934	1527	876
June	2098	1611	842
September	2946	2354	1627
December	2735	2318	1341
1847—March	3068	2185	1187
June	4809	2362	1263
September	5669	2783	1161
December	3725	2210	1795

REGISTRARS' NOTES.

The following Instruction was addressed to the 447 Registrars in the Country:—

"If at any time the number of deaths registered during the Quarter has been *above the average*, state, in a note at the foot of the Return, whether any epidemic disease, such as Measles, Typhus, &c., has been prevailing in the District, or if there be any other known circumstance which will account for the increase."

The Registrars alone must be held responsible for the opinions expressed in any of the subjoined Notes.

SUP. REG. DISTRICT	REG. DISTRICT	
MAIDSTONE	*West*	Deaths 61: being 3 below the average of four years. There were 14 from influenza phthisis, and other diseases of the lungs; and 6 from fever.
———	*Loose*	Deaths 24: being about the average. Fever prevailed in some parts of the district; 4 cases were fatal.
BRIGHTON	*St. Peter*	Deaths 173. Influenza has prevailed in Brighton for the last few weeks; but the deaths from that cause have been but few in this district, although the mortality may have been somewhat increased by its calling into action latent disease.
ISLE OF WIGHT	*Godshill*	Deaths 20: being below the average. The district would be healthy, but for influenza, which has just made its appearance; but no fatal case has yet occurred.
PORTSEA ISLAND	*Portsea Town*	Deaths 135: exceeding by 23 the highest number registered in one quarter since the commencement of the registration. The mortality has been principally amongst the very old and very young.
———	*Kingston and Landport*	Deaths 128: being 21 above the corresponding quarter of last year. The mortality has been very great among the aged, chiefly from acute bronchitis. 14 of the above number were between 60 and 70 years of age, 21 between 70 and 80, and 13 between 80 and 90 years. December has been very unhealthy, 67 of the above having been registered in this month; but within the last week the number registered is not much above the average.
———	*Landport and Southsea*	Deaths 158: 9 from scarlet fever; 9 from influenza (during last month); 19 persons died at 75 years of age and upwards.
WINCHESTER and HURSLEY	*Winchester*	Deaths 75: being 30 less than in the corresponding quarter of last year. 30 (out of the 75) were from pulmonary affections, chiefly in old people.
ST. ALBANS	*St. Albans*	Deaths 53: which do not exceed any quarter in the past year. No epidemic has visited this district.
WYCOMBE	*High Wycombe*	Deaths 59: being above the average. 6 were from scarlatina, and 2 from typhus.
NORTHAMPTON	*All Saints*	Deaths 67. The present quarter exhibits a very small increase of deaths upon the average of 11 corresponding quarters. Influenza prevails here very extensively at the present time; but the deaths caused thereby have been very few, and in those which are recorded other diseases have also been stated in connexion therewith.
———	*St. Giles*	Deaths 119: showing an increase on the last quarter of 12. Scarlatina, measles, and fever, have been very prevalent in the district, which is in a very unhealthy state.
BEDFORD	*Bedford and Cardington*	Deaths 82. Rather more than the average. Scarlet fever continued to prevail in the months of October and November.
CAMBRIDGE	*St. Giles*	Deaths 30. The prevalence of influenza during the last month has raised the number of deaths in this district somewhat above the average of the winter quarter.
NORWICH	*Conisford*	Deaths 34: much below the average.
———	*Mancroft*	Deaths 77: rather below the average.
———	*West Wymer*	Deaths 86. The influenza prevails in this district to a very great extent. It is of a mild character, and very few persons have been carried off by it.
GREAT YARMOUTH	*Southern*	Deaths 63: being about 12 above the average. The increase is caused entirely by the mortality amongst the aged: 11 of the 63 deaths registered occurred above 70 years of age; and the cause of death in the 11 cases is influenza, ending either in perig pneumonia notha, or bronchitis.
DEVIZES	*Lavington*	Deaths 39: being rather above the average. Measles has been very prevalent during the quarter, 4 cases having proved fatal.
———	*Bishop's Cannings*	Deaths 19. Measles prevailed in this district among children during the past quarter, but it was of a mild character; only 2 deaths were from this disease.
DORCHESTER and CERNE	*Cerne*	Deaths 16. The number of deaths registered this quarter is unusually small, only about half the amount of corresponding quarters, and one-third below that of any quarter since the commencement of the Registration Act.
EXETER	*St. David*	Deaths 85. This number is 20 less than the average number in the December quarter, of the four preceding years.

SUP. REG. DISTRICT	REG. DISTRICT	
EXETER	*St. Sidwell*	Deaths 90: average of four corresponding quarters, 134. Influenza has prevailed very generally; few houses have been exempt, and where it has gained a footing few of the inmates have escaped. This epidemic is commonly attended by rigor, nausea, headache, defluxion from the mucous membrane, pain in the epigastrium, strenum, loins, and more or less acute in the whole body; great lassitude, generally with cough, thick buff-coated tongue, with a peculiar fœtor of the breath, and dark offensive dejections; cramp of the extremities frequently precedes and accompanies the early stages. Fatal cases have been extremely rare, and those almost solely in very young or very old persons, from bronchitis. Purgatives, and diaphoretics, with the early use of a generous cordial diet, mulled wine, sherry, whey, &c., have, I believe, constituted the most successful practice. When a low diet has been long persisted in, the cough and lassitude have frequently been protracted to several weeks.
ST. THOMAS	*St. Thomas*	Deaths 39: being rather above the average of the corresponding quarter in previous years. 3 deaths occurred from typhus, and several from chest complaints. 10 of the number registered were of elderly persons of the age of 70 years and upwards.
———	*Exmouth*	Deaths 29: about the average. Eight occurred above the age of 70 years.
———	*Topsham*	Deaths 20. The influenza has just made its appearance here, but, as yet, in a very mild form.
———	*East Budleigh*	Deaths 11. The smallest number registered in any quarter since the passing of the Act, not exceeding half the average of the 10 years.
———	*Heavitree*	Deaths 22. This return is under the average, although the weather presented all the character favourable for disease. Epidemic catarrh prevailed, but in this district only 3 deaths were registered from it.
PLYMOUTH	*St. Andrew*	Deaths 200: being 53 above the average mortality of the 10 preceding autumnal quarters. The monthly mortality has been, October 48, November 49, December 103, and by far the largest proportion has occurred in the last 15 days. Deaths from fever 14, measles 8, consumption 20, bronchitis 6, pneumonia 5, and influenza 18. All the cases of influenza and most of the other deaths from the above-named causes took place in December, and caused the excess of mortality in that month. The aged, as is usual at this season of the year, have suffered most.
———	*Charles the Martyr*	Deaths 106: being rather above the average. The mortality during the month of December was very heavy: the numbers being 17 in October, 26 in November, and 63 in December, in which month diseases of the respiratory organs were exceedingly fatal to the aged. Measles and hooping cough have prevailed considerably amongst children. The causes of death registered during the quarter were as follows:—phthisis 14, bronchitis 18, influenza 6, pneumonia 3, measles 10, hooping cough 4, from all other causes 51.
REDRUTH	*Illogan*	Deaths 42: the influenza is now raging throughout this district, but there are only 2 cases where it has yet proved fatal.
———	*Camborne*	Deaths 51: being 11 below the average of the December quarter.
———	*Phillack*	Deaths 28. Influenza is very prevalent in this district, but no case has hitherto proved fatal.
PENZANCE	*St. Buryan*	Deaths 13. Influenza is very prevalent, but not fatal as yet.
———	*Marazion*	Deaths 13: much below the average, owing to many people having left the district for want of employment.
BATH	*Lansdown*	Deaths 84: being above the average; 16 were registered in October, 21 in November, and 47 in December. There have been from bronchitis and pneumonia 16 deaths, (11 of these in December), and from influenza 3, (all in December.)
———	*The Abbey*	The number of deaths (95) is exactly that of the corresponding quarter of 1846, and is high. The increase has been in December. There were registered in Oct. 18, Nov. 19, Dec. 58 deaths. 16 of the deaths in December were from affections of the respiratory organs. The influenza has been and is still very prevalent—only two deaths from it have been registered in this district; in one case synochus is joined with it, in the other pneumonia, but it is very possible that it may indirectly have increased mortality, though not mentioned as a cause of death, or rather that feature so commonly marking influenza, viz., depression of the vital powers, has, so far as my own observation goes, been a very frequent one of most diseases during the last quarter.
———	*Bathwick*	Deaths 41: being above the average. 5 were those of a mother and four children. The mother in a state of insanity killed her offspring, and then committed suicide.
———	*Batheaston*	Deaths 36. Not above the average. The district was very healthy until the middle of December, but since then influenza has been very prevalent, and a few deaths are registered from this cause.
———	*Tiverton*	Deaths 19: considerably below the average.
BRISTOL	*Castle Precincts*	Deaths 113. During the last month influenza has carried off many aged persons, and those of consumptive tendency.
———	*St. Augustine*	Deaths 80: double those of the preceding quarter, but not beyond the usual average. Influenza is very prevalent, though fatal in few cases.
———	*St. James*	Deaths 103: inflammatory diseases of the chest have prevailed lately: rubeola, pneumonia, &c., amongst the young, bronchitis amongst the old.
———	*St. Mary Redcliff*	Deaths 82: being 3 less than in the corresponding quarter of last year, and much below the average. The district has been generally healthy, until within the last few weeks, since which time influenza has generally prevailed and proved fatal in many cases, and is still increasing.
———	*St. Paul*	Deaths 103: rather exceeding the average. Influenza complicated with pneumonia and bronchitis has been especially prevalent during the last weeks. These complaints have proved very fatal to aged persons.

SUP. REG. DISTRICT	REG. DISTRICT	
CLIFTON	*St. Philip and Jacob*	Deaths 147. Below the average during October and November, and much above during December; influenza and bronchitis being extremely prevalent, and fatal amongst the aged.
———	*Ashley*	Deaths 46: ten above any corresponding quarter during the Registration. Though influenza has been prevalent, still it has been fatal only in 3 cases; bronchitis in 6.
———	*Westbury and Henbury*	Deaths 22. Although there has been much illness here, the deaths are much below the average.
———	*Saint George*	Deaths 48: shewing an increase of about 7 per cent. on the general quarterly average; but the actual mortality is 20 per cent.; and during the last month, the deaths have been 100 per cent. on the general monthly average. There have been a few cases of typhus. Influenza has prevailed, and to this must be attributed the increased mortality of last month. The difference between the real and apparent increase, is owing to the removal of a poorhouse for children, which contained 250 persons, and formerly stood in this district.
STROUD	*Stroud*	Deaths 44. The prevailing complaints are influenza, bronchitis, ulceration of the throat, erysipelas, rheumatic fever and synochus, but the cases not fatal.
HEREFORD & DORE	*City*	Deaths 56: being below the average. Influenza is just appearing, and in one case terminated fatally. In 1831, no authenticated case of cholera occurred in this district.
SHREWSBURY	*St. Mary*	Deaths 95: somewhat above the average, caused by scarlatina and influenza. Many aged people have died this quarter. Although influenza has been prevalent, few fatal cases have yet occurred in this district.
WORCESTER	*Worcester, West*	Deaths 64. In the beginning of this quarter, scarlet fever was exceedingly prevalent, especially in October. In the latter part, typhus and affections of the chest have predominated.
DUDLEY	*Rowley Regis*	Deaths 120: being the greatest number registered in any one quarter since the commencement of the Registration Act. Typhus and scarlatina extensively prevail in a part of the district, principally amongst children; 78 of the above are of children under 5 years of age.
———	*Sedgley*	Deaths 264; again more than those of any corresponding quarter. The causes of the increase are fever, measles, and diarrhœa. Fever, 89; measles, 17; and diarrhœa, 18.
———	*Dudley*	Deaths 394; being 78 more than in last quarter, 61 more than in the corresponding quarter of last year, and 150 above the average. Upwards of 100 persons died of fever, 33 of pneumonia, and 23 of diarrhœa; more than two-thirds of the deaths were of children of 5 years of age and under.
WALSALL	*Bloxwich*	Deaths 34: rather above the average, but from no particular disease.
———	*Darlaston*	Deaths 113. There has been a great deal of sickness in this quarter, and a considerable increase in the number of deaths from measles, hooping cough, typhus, and diarrhœa. Influenza has been very prevalent, but not fatal.
WOLVERHAMPTON and SEISDON	*Wolverhampton, Eastern*	Deaths 329: the greatest number in any quarter since the commencement of the "Registration Act." Scarlatina, and fevers of the typhoid class, have been very prevalent throughout the district during the entire quarter, especially in those localities where sanitary regulations have been neglected; in courts, where filth is allowed to accumulate, and without sewerage and ventilation. Of scarlatina there were 71 cases; of the typhoid class, 63; and of influenza, 5.
———	*Wolverhampton, Western*	Deaths 110: 14 from typhus, and 11 from scarlatina.
———	*Bilston*	Deaths 211: not more than 25 over the corresponding quarter of 1846. But the difference in the rate of mortality, between the first 9 weeks and the last 3, is most striking, and shows a fearful increase. 89 persons out of the 211 died in the last 3 weeks. The epidemic prevailing in other towns, accounts for the increase. People advanced in years were the principal sufferers.
———	*Willenhall*	Deaths 108: being above the average; and 9 above the corresponding quarter of 1846. Scarlatina and typhus caused the increase.
WOLSTANTON and BURSLEM	*Tunstall*	Deaths 146: much above the average. The district is still in an unhealthy state.
———	*Burslem*	Deaths 96: being 8.2 below the average of the last five corresponding quarters. 10 cases of fever and 3 of influenza are amongst the number.
BIRMINGHAM	*All Saints*	Deaths 113: one-fourth above the average. The increase is mainly attributable to scarlet fever, from which disease there have been twenty-eight deaths.
———	*St. George*	Deaths 390: being 146 more than in the corresponding quarter of 1846. There have died of scarlatina, 126; pneumonia, 27; phthisis, 21; bronchitis, 16; typhus, 13; measles, 5; and hooping cough, 4; the remainder from various other causes.
———	*St. Mary*	Deaths 329. exceeding the number of the corresponding quarter of last year by 66. The chief causes of death are fever, 62; bronchitis, 31; phthisis, 23; pneumonia, 19; marasmus, 19; diarrhœa, 18; influenza, 12; old age and natural decay, 25.
———	*St. Paul*	Deaths 130. This quarter is the heaviest that has occurred, being about 58 above the average, and 31 more than in the corresponding quarter of 1846. The deaths were principally from scarlet fever, of which there have been 40; from fever, 9; from puerperal fever, 2; from influenza, 3; from pneumonia, 6; from phthisis, 5; from bronchitis, 3; also from inflamed and diseased viscera, apparently arising principally from an immoderate use of intoxicating drinks, and consequently improper food and the want of it altogether; want of clothing, crowded population, badly ventilated and badly cleansed situations, confinement and hard work of females in close manufactories, and consequent debility of mothers and offspring.
———	*St. Philip's*	Deaths 119. Notwithstanding there have been upwards of 200 houses taken down for railway purposes in this district, the deaths registered in the quarter are 119. This number exceeds that of the preceding quarter by 39, and the corresponding quarter of 1846 by 38, and is the largest number registered in any one quarter since the commencement of the Registration Act. Scarlatina, bronchitis, and pneumonia, were very prevalent in the district. 26 children died of scarlatina, 10 children of pneumonia, 16 persons of bronchitis, and 3 of typhus.

SUP. REG. DISTRICT	REG. DISTRICT	
BIRMINGHAM	*St. Peter*	Deaths 153: being 50 above the average, arising from scarlet and typhus fevers, principally among children.
———	*St. Martin*	Deaths 166: being above the average. Typhus and scarlatina have been very prevalent, and proved fatal in 32 cases. 17 persons also died from diarrhœa, and 6 from measles.
———	*St. Thomas*	Death 239: greatly exceeding those of any previous quarter since the Registration Act commenced. The deaths have arisen from various causes. Scarlatina has been very prevalent, 69 having died from it, chiefly children under 10 years of age.
———	*Lady Wood*	Deaths 156: being 89 more than in the previous quarter, and 54 above the corresponding quarter of the year 1846. The increase arises principally from the great mortality amongst young children, 82 being under five years of age. Scarlatina has been fatal to an alarming extent, 39 having died from that disease. There are 10 deaths from typhus, 9 from rubeola, 8 phthisis, 5 bronchitis, 5 pneumonia, 8 diarrhœa, 6 convulsions, and 5 puerperal fever.
ASTON	*Duddeston and Nechells*	Deaths 261. Small-pox, measles, scarlatina, and typhus, have been very prevalent, making this quarter's return much above the average.
———	*Erdington*	Deaths 58: being above the average, and the greatest number registered in one quarter.
———	*Deritend and Bordesley*	The present number of deaths (179) is about 60 above the average. Scarlet fever of the malignant kind has prevailed rather extensively. 19 cases are registered of scarlatina, and 10 of typhus. Influenza has been very prevalent, but only two deaths are registered as from that cause directly. There are, however, 9 from pneumonia and 8 from bronchitis.
COVENTRY	*Holy Trinity*	Deaths 72. Although there has been much sickness, and great distress through want of employment in this district during the last quarter, the rate of mortality is not higher than usual. The proportion of deaths among children, however, is remarkable, there being 44 at five years of age and under. Of the causes of deaths, 9 were from measles, 6 from phthisis, 5 from fever, and 4 from influenza.
LEICESTER	*East Leicester*	The number of deaths registered (225) shows an increase of 22 over the preceding quarter, and a decrease on the corresponding quarter of 1846, of 35. Influenza has been very prevalent, but only fatal in 3 cases. Asthma and consumption have been the chief causes of death.
———	*West Leicester*	Deaths 120: showing a decrease of 14 on the corresponding quarter of 1846. There has been a great deal of influenza in this district, but not fatal.
LINCOLN	*Home*	Deaths 136. The mortality has increased considerably this quarter. Although the prevailing epidemic (influenza) has visited almost every house, the deaths from that cause have been only 6; but with bronchitis, the number is 15. Consumption has been much more fatal, being one-sixth of the causes of mortality.
———	*South*	Deaths 53. This is less than the average. During this quarter there has been very little illness, with the exception of one little village, with a few cases of typhus. There has been no epidemic, except influenza; and of this no cases fatal.
NOTTINGHAM	*St. Ann*	Deaths 144: being an increase of 51 over the corresponding quarter of last year, arising principally from typhus, pneumonia, and influenza, the last proving exceedingly fatal to those already suffering from bronchitis and asthma. 48 children died under 2 years of age, whilst 33 adults exceeded 60 years. 35 deaths occurred in October, 33 in November, and 76 in December. The deaths in the union hospital (which is situated in this district) amounted to 62. Many of these were of persons who had been brought in only a few days previously from different parts of the town, and several had been recently admitted as vagrants unable to proceed further. The average age of 5 males, who had resided some time in the workhouse, exceeded 84 years each.
———	*Byron*	Deaths 100: being 24 more than the average. The increase arose within the last 10 days, chiefly from influenza and pneumonia, which are now very prevalent.
———	*St. Mary*	Deaths 47: not much above the average, being only 5 more than in the quarter ending December, 1846. The former part of it has been light, having produced only 12 deaths in October, and only 9 in November. In the month of December, there were registered 26: principally owing to inflamations and influenza, which has been very fatal to aged persons and young children.
———	*Castle*	Deaths 52. The deaths in this district during the last 12 days have been very considerably above the average. The increase is caused by influenza, which prevails most extensively.
BASFORD	*Wilford*	Deaths 35: being above the average owing to typhus fever in the village of Ruddington, 13 deaths having occurred there from that cause in the quarter.
———	*Arnold*	Deaths 38: about the average number, although 13 less than in the corresponding quarter of 1846. This is rather remarkable, as this district, for the last 2 months, has been in a very unhealthy state. Influenza has been and is very prevalent, but was only fatal in one case.
———	*Greasley*	Deaths 49: much below the average. This may be accounted for by the great mildness of the season. The influenza has been very prevalent for the last three weeks, but in a very mild form, only one death having been registered from this cause, and that of a person much advanced in years.
———	*Basford*	Deaths 56: being considerably under the average; 36 less than in the corresponding quarter of last year. Influenza is very prevalent in this district.
DERBY	*St. Peter*	Deaths 185. In the same quarter of the previous year 151 were registered.
———	*St. Alkmund*	Deaths 125: being 37 above the average of the December quarters. Fever has been prevalent, there having been 20 cases registered; also influenza, of which there were 9 fatal cases.
STOCKPORT	*Stockport (First)*	Deaths 207: being about the average. There were very few in the months of October and November, but in the early part of December the influenza was very prevalent, and continued during the whole month, and proved fatal in many cases among children and old people.

SUP. REG. DISTRICT	REG. DISTRICT	
STOCKPORT	*Stockport (Second)*	Deaths 69: considerably below the average.
———	*Hyde*	Deaths 125: being above the average. Scarlatina was prevalent; also influenza combined with bronchitis, has been the cause of many deaths.
———	*Heaton Norris*	Deaths 102: being 27 less than in the corresponding quarter of last year. In October there were 29 deaths, in November 21, in December 52. Influenza, although not proving fatal in the district before the middle of December, caused 6 deaths. Of these 6 cases, one was accompanied with asthma, 3 with bronchitis, and one with apoplexy. Influenza, bronchitis, and pneumonia, and the extreme privations of the working classes in the depth of winter, have contributed to more deaths in December than in both the preceding months.
———	*Marple*	Deaths 20: being below the average. Influenza has been very prevalent, but in no case fatal.
———	*Hazelgrove*	Deaths 29: being above the average. 8 persons died of scarlatina, and 2 of smallpox (not previously vaccinated). These are the first cases of smallpox that have been registered in this district since the Act of Registration came into operation. From inquiries made, there is reason to believe that very many in this district, of 5 years of age and under, have not been vaccinated at all, and this is owing in a great measure to the negligence of parents. 4 persons died of influenza. The privations of the people have been exceedingly great during the last four months, and these have accelerated the diseases which are very prevalent in this district.
MACCLESFIELD	*East*	Deaths 107: being above the average, from the prevalence of small-pox, typhus, scarlatina, and influenza. There were 16 deaths from small-pox, nearly all without previous vaccination. Hooping cough is also very prevalent throughout the district.
———	*West*	Deaths 145. More deaths have arisen from epidemics than in any previous quarter. There have been 19 cases of typhus, 10 of scarlatina, 9 of fever, and 7 of small pox, none of which last had been previously vaccinated.
———	*Rainow*	Deaths 28: being above the average.
———	*Prestbury*	Deaths 41: this number is considerably above the average mortality of the district, in consequence of the prevalence of scarlatina, typhus, and influenza.
GREAT BOUGHTON	*Cathedral Division*	Deaths 112. There have been 17 cases of fever of different kinds, but most of them typhus; and 3 cases wherein influenza has been the cause of death.
LIVERPOOL	*Saint Martin*	Deaths 735: considerably above the average. The prevailing diseases have been typhus, diarrhœa, phthisis, bronchitis, and influenza.
———	*Great Howard Street*	Deaths 654. This return shows that there has been a decrease of nearly one half in the deaths this quarter, as compared with the last quarter. This is owing principally to a great decrease in the number of fever cases. Diarrhœa and dysentery also have in a great degree subsided. Bronchitis prevails.
———	*Dale Street*	Deaths 426: being less than in the preceding quarter by 322. This is accounted for by the removal of fever cases out of the district to the workhouse and fever sheds, likewise by the closing of cellars. Fatal diseases were as follow: fever, 68; bronchitis, 44; consumption, 27; pneumonia, 17; diarrhœa and dysentery, 20; phthisis, 15; asthma, 10; small pox, 5, &c.
———	*Saint Thomas*	Deaths 419: being 195 less than in the preceding quarter, if those formerly in the fever ships, which have been given up are not reckoned. The district at present is comparatively healthy.
———	*Mount Pleasant*	Deaths 877: including 524 at the workhouse, and 40 at the infirmary. The deaths this quarter are 79 less than in the last quarter. There were 319 fatal cases of fever, 29 of phthisis, and 77 of marasmus, in the workhouse. There have also been 36 fatal cases of fever in this district, independently of the workhouse. Influenza has been very prevalent, and fatal in 19 cases.
———	*Islington*	Deaths 420: showing an increase of 48 over the corresponding quarter of last year. Fever still prevails. 66 deaths occurred from typhus, 16 from scarlatina, and 11 from influenza.
WEST DERBY	*West Derby*	Deaths 247: exceeding the average. Influenza, typhus, and scarlatina prevail. From typhus there were 81 deaths: from scarlatina, 7; from influenza, pneumonia, and bronchitis, 29.
———	*Everton*	Deaths 274: of which 57 were from fever, 11 from influenza, and 27 from scarlet fever.
———	*Toxteth Park*	Deaths 502: being a decrease of 76, compared with September quarter, 1847. From typhus there were 50; diarrhœa, 31; dysentery, 6; consumption, 23; small pox, vaccinated, 2; not vaccinated, 9; measles, 1; scarlatina, 2; influenza, 20; bronchitis, 75; and pneumonia, 42.
BLACKBURN	*Blackburn*	Deaths 395: being above the average. Scarlatina, typhus, and hooping cough, have been very prevalent this quarter.
PRESTON	*Preston*	Deaths 499. This district has been healthy during the quarter, except in the two last weeks, when influenza prevailed.
———	*Alston*	Deaths 28: being more than the average. 11 died in Ribchester workhouse, most of them old persons.
———	*Walton-le-Dale*	Deaths 40. This number is below the average.
ROCHDALE	*Spotland Nearerside*	Deaths 80: showing an increase of 11 over the corresponding quarter of last year, arising from scarlatina and typhus.
———	*Wardleworth*	Deaths 84: not above the average. There have been 4 cases of typhus, 7 of scarlatina, 9 of phthisis. 12 have not had any medical attendant.
BURY	*North*	Deaths 95: from scarlatina, 27; from asthma and consumption, 17; from pneumonia and bronchitis, 15.

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BURY	*South*	Deaths 81: about an average number. There have been 18 deaths from scarlatina, 9 from typhus, and 3 from influenza. 13 persons died whose united ages amount to 1003 years, giving an average of rather more than 77 years each.
———	*Birtle*	Deaths 29: rather more than the average of the last four December quarters, 7 cases of scarlet fever having proved fatal. The district is in a healthy state.
———	*Elton*	Deaths 50: a full average: influenza prevailing, and fatal in several cases.
———	*Holcombe*	Deaths 54: being above the average of corresponding quarters. Scarlet fever has been prevalent, and in many cases fatal.
BOLTON	*Eastern*	Deaths 220: 8½ more than the average of the year, and precisely the same as in the corresponding quarter of last year. The increase is owing to typhus (introduced by Irish immigrants), measles, and scarlet fever of a very malignant kind.
———	*Western*	Deaths 205: considerably above the average of the corresponding quarter of former years. The increase happened during the month of December; for in that month 105 deaths were registered, while in the months of October and November, only 100. This increase may be attributed to the prevalence of influenza, scarlatina, measles, pneumonia, bronchitis, and asthma.
———	*Little Bolton*	Deaths 126. This district has been in a very unhealthy state for the last 3 months. Several severe epidemics have prevailed, but none of them have proved generally fatal. Influenza and typhus have been exceedingly prevalent, but only 2 deaths from the former, and 6 from the latter, have occurred. Infantile disorders have raged very much, but the mortality of which they have been the cause is not remarkable in amount. The severity of the weather, and the exceeding pressure on the lower classes in consequence of the scarcity of work, have doubtless contributed to the spread of disorders amongst infants. In consequence of the superior drainage, sewerage, and well paved streets, as also the removal of all nuisances being well attended to by the trustees under the Local Act, the number of deaths is considerably less in this district as compared with the population, than in the adjoining town districts. The number of deaths this quarter (with the extraordinary amount of sickness) is less than the average of the corresponding quarters of the last 10 years.
———	*Little Hulton*	Deaths 34: not more than usual. In October and November, there were registered 13: in December 21; mostly of old people and children, who died from influenza or colds.
———	*Lever*	Deaths 39: rather more than the average. There has been no epidemic in the district, except influenza, which has been very prevalent. Only one death from influenza has been registered.
WIGAN	*Wigan*	Deaths 290: of which number 120 are of children under five years of age (38 having had no medical attendant). 14 persons died from scarlatina, 40 from typhus, 6 from croup, 2 from measles, 15 from diarrhœa, 14 from small pox, 9 from dysentery, 9 from pneumonia, 25 from phthisis, 46 from asthma or bronchitis, and 11 from influenza.
———	*Aspull*	Deaths 32: about the average. No epidemic.
———	*Hindley*	Deaths 74. There has been no epidemic in this district during the quarter.
———	*Upholland*	Deaths 46. Typhus prevailed.
PRESCOT	*St. Helen's*	Deaths 150: 111 below the average of the corresponding quarter of last year. From pneumonia, 11 persons died; scarlatina, 5; measles, 5; typhus, 12; influenza, 3; delirium tremens, 4; and diarrhœa, 10.
———	*Prescot*	Deaths 126. Fever in this district has considerably abated, and the number of deaths arising from that fatal disorder is less than in any quarter during the year. The number of deaths is more than 50 above the general average. 56 persons died from various causes under 5 years of age, 10 above 60 years, 11 above 70 years, and 4 above 80 years of age. Many of these deaths, no doubt, have been caused by the prevalence of influenza.
———	*Farnworth*	Deaths 22: about one fourth above the average, in consequence of a few cases of typhus and of scarlatina, which latter, together with measles, has been very prevalent among children.
———	*Huyton*	Deaths 13: being below the average. Small pox has been prevalent, but in no case fatal.
———	*Much Woolton*	Deaths 35. This is above the average, though 5 less than in the corresponding quarter of last year.
CHORLTON	*Chorlton upon Medlock*	Deaths registered in October, 49; November, 68; December, 138: total, 255. Males, 123; females, 132. From typhus, 32 cases are recorded, 10 in October, 15 in November, and 7 only in December, from which it would appear that this disease is on the decrease. An analysis of the principal causes of death, during December, when the mortality was double the average, presents the following results:—hydrocephalus and convulsions, 10; influenza, 17; bronchitis, 13; pneumonia, 12; pertussis, 6; measles, 5; scarlet fever, 4; phthisis, 12; marasmus, 6; diarrhœa and dysentery, 14; typhus, 7; casualties, 5; other causes, 27:—total, 138. The numbers registered in the week ending December 7th, were 21; 14th, 39; 21st, 38; 28th, 24; the last manifesting an improvement. During the quarter, the deaths up to 10 years of age, have been 136; 10 to 50 years, 62; 50 years and upwards, 52. The total of deaths for 1847 have been 873; average per quarter, 218·25. " " 1846 " 904 " 226. " " 1845 " 788 " 197. " " 1844 " 670 " 167·5. " " 1843 " 722 " 180·5.
———	*Hulme*	Deaths 361: being a slight increase (3) upon the previous quarter. 95 of this number were registered in the month of October, 82 in November, and 184 in December. This excessive mortality in the last month has been caused by the prevalence of the epidemic catarrh, and its influence upon those invalids who were previously suffering from chronic bronchitis, and other affections of the respiratory organs. From the medical certificates of the cause of death, it does not appear, in this neighbourhood,

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CHORLTON ..... *Hulme (continued)* ..... that many individuals who were in previous good or robust health, have died from influenza. The constantly moist state of the atmosphere, and the morbific agency with which it has been charged, have produced an unusual number of cases of croup, and appear (as shewn by the subjoined analysis) to have given a more malignant character to the symptoms of scarlet fever. In the quarter just closed, the deaths from pulmonary consumption are 44, which certainly appears a large proportion of the aggregate number. It may be remarked, that the late epidemic (for it has nearly subsided in this neighbourhood) has visited this country under rather unusual circumstances. Instead, as at former periods, of appearing during the prevalence of East and North-East winds, it has existed through a month, when the wind has almost invariably been from the South or South-West, and on its changing to the North-East it began to subside. Small pox caused 5 deaths; croup, 8 (6 of which occurred in the month of December) hooping-cough, 9; scarlet fever, 28 (15 of which occurred in the month of December); pulmonary consumption, 44; various other diseases, 267.

——— ..... *Barton-upon-Irwell*..... Deaths 126: considerably above the average, owing to measles, scarlatina, and typhus having been very prevalent during the quarter.

MANCHESTER ..... *Ancoats*..... ..... Deaths 574: are above the average, 84 of which took place in a workhouse that is now in this district. Independently of this, the increase chiefly arose in December, in which month 270 were registered; in November, 135; and in October, 169. The greatest increase has been chiefly caused by pneumonia. During the last 10 days of the quarter, the mortality kept gradually decreasing.

——— ..... *St. George* ..... Deaths 317: considerably below the corresponding quarter of last year. This may be accounted for in a great measure by the cheapness of provisions of all kinds, and the improved condition of the dwellings of the poor. In the quarter ending 31st December, 1846, fever and measles were the prevailing epidemics, and these diseases were much aggravated by the unhealthy abodes of vast numbers of the population of the district. This quarter the prevailing epidemics are scarlatina, fever, and influenza, with bronchial affection; and although deaths from scarlatina have been numerous, those from fever, and other epidemics, have not been so many; and considering the amount of distress which still exists from bad trade, the district is at the present time in a much healthier condition than it has been for some time past. The principal causes of death during the quarter may be thus classed:—scarlatina, 70; fever, 31; bronchitis and influenza, 23; pneumonia, 18; hooping cough, 7; measles, 6; asthma, 11; diarrhœa, 13; consumption, 25.

——— ..... *Market Street*..... Deaths: males, 261; females, 240; total, 501. Of this number, 120 have taken place at the workhouse, New Bridge-street. 142 deaths, or 75 males and 67 females, are fever cases, registered at the Workhouse Hospital, Irk Mills, Long Millgate, being a lower number by 17 than the return for the preceding quarter. At Tib-street Workhouse, 4 deaths only have occurred, the building having been converted into a workshop for the able-bodied poor. At the Royal Infirmary, 46 persons have died, over 24 of whom coroner's inquests were holden. Independently of the foregoing, the number of deaths in the district for the quarter just terminated, is lower than in any previous quarter during the year, comprising 100 males and 84 females; total, 184; add to the last number 5 coroner's cases, which make 189 deaths. Of the 184 deaths, 98 were of persons under the age of 15 years; from 15 years to under 60, 58 deaths; and at the age of 60 years and upward, 28 deaths.

——— ..... *London Road* .....

Principal causes of death.	No. of deaths in the December quarter.					Proportion per cent. of deaths in the December quarter.				
	1847	1846	1845	1844	1843	1847	1846	1845	1844	1843
Fever	50	59	16	23	23	18.00	16.30	7·30	8.74	10.06
Scarlatina	23	2	22	8	4	8.28	0.55	10.02	3.04	1.75
Phthisis	23	14	23	14	8	8.28	3.87	10.50	5.32	7.87
Convulsions	19	18	15	24	12	6.84	4.97	6.85	9.12	5.25
Pneumonia	17	25	17	40	24	6.12	6.90	7.76	15.20	10.50
Bronchitis	15	13				5.40	3.59			
Measles	15	49	5	25	7	5.40	13.53	2.28	9.50	3.06
Marasmus	11	25	5	10	12	3.96	6.90	2.28	3 80	5.25
Dropsy	11	10	9	4	11	3.96	2.76	4.11	1.52	4.81
Dysentery	9	—	—	—	—	3.24	— —	— —	— —	— —
Diarrhœa	8	19	9	7	5	2.88	5.25	4.11	2.66	2.19
Asthma	6	17	6	16	6	2.16	4.70	2.74	6.08	2.62
From 12 causes	207	251	127	171	112	74.52	69.32	57.95	64.98	53.36
All other	71	111	92	93	107	25.50	30.68	42.05	35.02	46.64
Total December quarter	278	362	219	264	219	100.—	100.—	100.—	100.—	100.—

Deaths 278. Males 134, females, 144. This number is less than that of the corresponding quarter of the last year by 84, and exceeds that of the average of 1845, 1844, and 1843, by 40. The December quarter of 1846 was remarkable for its very low temperature, that just closed has been marked by much rain and open weather. Fever, so extensively prevalent in the immediately preceding September quarter, has continued, though in a less degree, amounting to about 18 per cent. of the entire deaths: an excess of nearly 2 per cent. over those of the previous December quarter. Scarlatina, as in the quarter for 1845, ranges high, being above 8 per cent. Phthisis, although the season has been more mild, numbers about 4½ per cent. over the return for December, 1846. Influenza has been all but universal; there have been, however, but few deaths registered from this cause. Nor has there been any material increase in pneumonia and bronchitis, about 1 per cent., and if asthma be included, the deaths from these three causes in December, 1846, were upwards of 15 per cent.; in the quarter for 1847, below 14. Measles, in 1846, amounted to nearly 14 per cent.; in 1847, less than 6 per cent. Diarrhœa gives under 3 per cent., at the former period it stood above 5. But on the other hand, dysentery, which at all former periods was rare, carried off 3 per cent. in the quarter just closed. The above table shews the comparative returns during the last 5 years; the number of deaths arising from the principal causes, and their proportion per cent. respectively.

SUP. REG. DISTRICT	REG. DISTRICT	
MANCHESTER	*Deansgate*	Deaths 322: considerably above the average, 67 being from diseases of the zymotic class. The amount of mortality varies also greatly for each month, the deaths being in October 95, November 72, December 145, exclusive of 10 coroner's cases. Of the total number, 227 were certified, leaving 95 that had no medical assistance. 150 of the deaths were of children under the age of 5 years, viz.:—under 1 year, 54; between 1 and 2 years, 51; between 2 and 3 years, 16; between 3 and 4 years, 17; and between 4 and 5 years, 12. Of these 94 were certified, leaving 56 that had no medical attendance. The leading causes of death were as follows:—typhus, 35; scarlatina, 18; measles, 14; diarrhœa, 35; marasmus, 21; convulsions, 24; hooping cough, 8; hydrocephelus, 5; phthisis, 26; bronchitis and pneumonia 41. The number of deaths from typhus, scarlatina, and measles is considerable, as well as from diarrhœa or dysentery and bronchitis, and it may be observed that the subjects of these latter fatal affections have very generally sunk into a typhoid state very soon after having been attacked. The deaths from diarrhœa will be found chiefly in October and the beginning of November, and I had occasion to remark in my last report that most of the cases of fever in this district set in with this enteric affection. Of late the type has changed a good deal, and the attack is now generally ushered in by bronchitis or general pulmonic inflammation. Under ordinary circumstances, perhaps, these cases would run their course as such, but the subjects enfeebled by long privation, almost exhausted by want of the common necessaries of life have not vital power sufficient to carry on active inflammation. Effusion takes place at a very early period, and the patients die suffocated, or sink into a low typhoid state with dry black tongue and muttering delirium, so that instead of the active treatment usually available in these pulmonic affections, support is required for the system almost from the beginning. Having occasion to go about in search of employment, scantily clad, in the cold damp weather usually prevalent at this time of the year, with their few clothes saturated with rain the whole day, and little, and but slightly nutritious food to keep up the heat of the frame, they have no power of resisting external agencies. Congestion in the lungs takes place at first, and a continuance of the same circumstances brings on low inflammatory action under which they rapidly succumb. A single case will illustrate these remarks, and afford the type to a large number of cases that have fallen under my observation in this neighbourhood. A poor man about 45 years of age fell under my care. His wife had been paralytic for several years, and was incapable of even dressing herself, and could render him no assistance. He had three children. His earnings for some time had not been more than 6 or 7 shillings per week, with which he had to pay rent, to find coal, candles, and clothing, &c., for himself and family, and to purchase provisions. Day after day he had been drenched with rain, still keeping on his wet clothes. Cold and hungry he returned home to his helpless wife, and found little to cheer his mind or recruit his wearied frame, and he laid himself down at last worn out with cold, hunger, and fatigue, and that sickness of heart which passes all, beside his poor partner. I found him with quick but feeble pulse, hurried yet impeded respiration, anxious countenance, and emaciated form, suffering from bronchitis. In two or three days his tongue was dry and black, his skin clammy, respiration difficult from effused fluid, whilst the imperfectly oxygenized blood that rushed through his brain troubled and clouded his intellect, and he muttered unceasingly his confused and dreamy wanderings. The treatment was of the mildest, and light nutritious aliments, with the stimulus of a little wine, soon formed the chief part of it, and he gradually recovered. Sharper treatment would have killed him. The commercial depression which has prevailed in this city for some months past, and the consequent stoppage of work, has fallen with terrible severity on the working classes, whilst the unrepining patience with which they have borne it, and hoped against hope, cannot have failed to excite the sympathy and admiration of those whose duty it is to go amongst them.
———	*Blackley*	Deaths 48: being about twice the average number. Scarlatina has prevailed, but the district now assumes a more healthy state.
SALFORD	*Regent Road*	Deaths 179: exceeding the average about 12 per cent. There were a few deaths from influenza, also from fever, but bronchitis prevailed more extensively. The deaths in 1847 did not exceed the yearly average.
———	*Greengate*	Deaths 295. The deaths in October and November were about the average, (69 in October and 74 in November) but in the month of December, 152 deaths were registered; 29 of these were caused by bronchitis, and 21 by typhus, of which 10 occurred in the fever ward.
———	*Pendleton*	Deaths 127. The increase over previous quarters arises from scarlatina and influenza.
ASHTON and OLDHAM	*Ashton Town*	Deaths 255. Up to the 10th of December, inclusive, the deaths were comparatively lighter than usual for the quarter, (i.e.) 133; the remaining 122, including 8 inquest cases, have occurred since the 11th of December. In the quarter there have been 31 cases of typhus (of which 25 were in the fever wards) of scarlatina, 25 cases; measles, 25; bronchitis, 9; and diarrhœa, 7.
———	*Audenshaw and Droylsden*	Deaths 74. A decrease of 3, as compared with the corresponding quarter in 1846; but an increase of 21 on the same quarter, in 1845. Deaths from scarlatina, 9; typhus, 4; influenza, 3; from old age, a great many. A considerable amount of sickness still prevails.
———	*Knott Lanes*	Deaths 41: an excess over last quarter of 8; over the corresponding quarter of last year of 4. Measles and scarlatina have been prevalent, particularly the latter. The district is rather improving in health; there are not so many cases of scarlatina as there have been for some time.
———	*Denton and Haughton*	Deaths 55: being above the average, but about the same as in the corresponding quarter of 1846.
———	*Dukinfield*	Deaths 198: being 39 less than in the corresponding quarter of 1846. Typhus was fatal in 7 cases, scarlatina 3, measles 15, small pox (without previous vaccination) in 15, phthisis in 24, marasmus in 20, influenza in 12, asthma in 10, pneumonia in 11, croup in 6, bronchitis in 4, and diarrhœa in 6.
———	*Stayley*	Deaths 26: being under the average of corresponding quarters.
———	*Mottram*	Deaths 27: this return is below the average.
———	*Oldham below Town*	Deaths 188: of which 55 were in October, 40 in November, and 93 in December.

SUP. REG. DISTRICT	REG. DISTRICT	
ASHTON and OLDHAM.	*Oldham above Town*	Deaths 214: being above the average. Of these 51 are from scarlatina, 24 from typhus, (a decrease on the last quarter,) and 14 from chronic and acute bronchitis.
———	*Middleton*	Deaths 77: being considerably above the average, and the greatest number registered since the Registration Act came into operation. Scarlatina has been very prevalent and of a most malignant character, 36 deaths having occurred from that disease. Influenza has also been very prevalent, but not to such an alarming extent as scarlatina, but many aged persons have died from that cause. 58 causes of death out of the 77 were attested by medical certificates, thereby showing the great desire with which the "profession" is actuated to procure correct returns.
———	*Royton*	Deaths 72: (in October 12, November 22, December 38,) being 25 above the average of the last 7 years. October was a fine month but November and part of December were very wet. Scarlatina caused 8 deaths. The disorders most prevalent have been measles, scarlatina, small pox, typhus fever, and the prevailing epidemic influenza, together with affections of the respiratory organs.
———	*Chadderton*	Deaths 71: considerably above the average owing to the prevalence of scarlatina.
———	*Crompton*	Deaths 46: which is above the average. Scarlatina and influenza have been prevalent.
SHEFFIELD	*Park*	Deaths 76: being below the average. The prevailing epidemic, (influenza), is not generally fatal in this district. The corresponding quarter of last year showed 125, but that was unusually large.
———	*South*	Deaths 84. This district was tolerably healthy until the month of December. More than one-half of the deaths occurred during the last five weeks.
———	*West*	Deaths 139: in October 27, November 27, December 85. The following are amongst the certified causes of death, viz.:—typhus and other fevers, influenza, bronchitis, phthisis, pneumonia, and dysentery.
———	*North*	Deaths 302: from influenza, 4; hooping cough, 12; scarlatina, 16; diarrhœa, 16; typhus and other fevers, 50.
———	*Brightside*	Deaths 73: though considerably less than those of the corresponding quarter of last year, they are above the average for the same quarters in previous years. The mortality has chiefly been among the young and the aged, there having been 35 deaths under 5 years of age, and 14 from 60 to 90 years. Fever, diarrhœa, consumption, and influenza have been most prevalent, particularly the last mentioned, though only one case has proved fatal.
———	*Attercliffe*	Deaths 48: 23 above the average. The unusual number of 18 occurred at 60 years of age and upwards.
HUDDERSFIELD	*Kirkheaton*	Deaths 65: although diseases having the symptoms of influenza have prevailed much in this district, yet few deaths have ensued in consequence, the number being not far from the average.
———	*Kirkburton*	Deaths 78: considerably above the average. 42 were of children under 10 years of age, (15 from scarlatina) and 9 of persons above the age of 70 years. Scarlatina still prevails.
———	*Holmfirth*	Deaths 63: 10 persons died from scarlatina, and 7 from small pox. Out of 63 deaths registered, 41 had no qualified medical attendant.
———	*Honley*	Deaths 43: considerably less than in the corresponding quarter of 1846, and little more than the average of preceding years. Throughout the district, influenza has prevailed, but it has hitherto been much milder than in other districts, as only 3 deaths from influenza have been registered in the last quarter.
———	*Meltham*	Deaths 35: rather above the average, which is principally caused by the mortality amongst aged people, a greater number than usual of whom having been cut off. Influenza and croup have been very prevalent, but not fatal in many cases.
———	*Lockwood*	Deaths 48: somewhat more than the average. There has been a great deal of influenza in this district for the last two months, which has been succeeded by typhus and scarlatina in several cases, and has ultimately terminated in death.
———	*Slaithwaite*	Deaths 42: shewing a great increase, although there has been no epidemic prevailing in the district. The average of corresponding quarters of the last 5 years is 31. The increase has principally occurred in old people, 15 having died at and above 60 years of age.
———	*Golcar*	Deaths 67: being above the average. The excess arises from mortality amongst children, 20 having died under 3 years of age. No epidemic.
HALIFAX	*Elland*	Deaths 60: 48 less than in the corresponding quarter of last year, notwithstanding the continued prevalence of scarlatina, the deaths from which have been 15. Influenza is now very prevalent, but has been fatal only in 3 cases, the ages of the persons being 90, 82, and 73 respectively.
———	*Brighouse*	Deaths 57: although the prevailing epidemic, influenza, has been general throughout this district, it does not appear to have much increased the mortality. This return gives 6 less than in the corresponding quarter of last year, and 2 only attributable to the above disease. The deaths for the quarter are 57, only 15 of which occurred from the beginning of November to the middle of December, when the epidemic most prevailed, the virulence of the complaint having been checked by prompt medical aid.
BRADFORD	*East*	Deaths 136: being above the average this quarter, when the decrease of inhabitants in the district is considered. About 1000 houses are uninhabited. Deaths from typhus 14, and measles 6.
———	*Cleckheaton*	Deaths 45: being 13 less than in the corresponding quarter of last year. Influenza has been prevalent throughout the whole of the district, but it has only proved fatal in one case. A few cases of typhus and scarlatina have also occurred.

SUP. REG. DISTRICT	REG. DISTRICT	
BRADFORD	*Idle*	Deaths 72: being above the average. The influenza has been epidemic in this district, but it does not appear to have been the immediate cause of death. But this, in connexion with the very wet and unhealthy weather which prevailed about the same time, seems to have been the means of developing other latent or incipient diseases which have been the cause of the increased mortality. Above one third are of aged persons about 60, 80, and 90 years.
———	*Calverley*	Deaths 38: a greater mortality than at any former period. In the preceding quarter there were 14 deaths; in the corresponding quarter of 1846, there were 20. The amount of influenza has been quite extraordinary, but in few cases fatal; other diseases have come along with it that have proved fatal.
———	*Drighlington*	Deaths 32: which shows a slight excess above the average. The maladies most prevalent during the quarter have been consumption and fever. Only one death from influenza.
———	*Pudsey*	Deaths 67: about 13 per cent. above the average, calculating from the commencement of the Registration Act, but precisely the same number as that of the corresponding quarter in 1846. The increase upon the whole number can only be accounted for by the season of the year, not by any fatal epidemic.
———	*Horton*	Deaths 117. There has been no particular disease in this district, except in 10 days commencing November 27th, when influenza was prevalent, and proved fatal in several cases to aged persons. The total number of deaths is less than in any of the four preceding quarters. This is partly owing to many families having left the neighbourhood, in consequence of want of employment.
LEEDS	*North*	Deaths 330: rather on the increase compared with those of the preceding quarter, but a decrease on the corresponding of 1846; yet there is an increase upon the whole of last year as compared with the preceding one, of 263, thus showing that the increase was in the two first quarters of 1847. Of the above number, there occurred from asthma, 11; bronchitis, 17; consumption, 25; diabetes, 1; diarrhœa, 11; dysentery, 12; influenza, 7; scarlatina, 11; small pox, without vaccination, 19; with vaccination, 2; typhus, 48. There is very much sickness in this district at present, chiefly from influenza.
———	*West*	Deaths 250: 5 less than in the corresponding quarter of 1846. There have been 20 deaths from scarlet fever, 3 from typhus and 6 from influenza.
———	*South East*	Deaths 255: being 60 less than the number registered during the preceding quarter, and 5 less than the corresponding quarter of 1846. Typhus has been prevalent during the months of October and November, but has abated considerably during the month of December. Measles and pneumonia have also been prevalent during this quarter.
HUNSLET	*Hunslet*	Deaths 159: being 25 per cent. more than the average; in December 73, double the monthly average. During the first week in the said month, 23 deaths occurred, the usual number in this district being 8 weekly. Influenza, bronchitis, cynanche, and measles, have been prevalent and fatal in many cases.
———	*Holbeck*	Deaths 150. Measles has been prevalent, and in many cases fatal during the quarter.
———	*Wortley*	Deaths 100: being above the average. Scarlatina and influenza have prevailed, and in many cases been fatal. Their malignity has been apparently increased by the privations of the operative classes through want of employment, and consequent inability to procure such comforts and needful medical aid, as might have had a counteracting tendency.
———	*Rothwell*	Deaths 44: being above the average, arising from influenza and fever, which have been rather prevalent, and have taken away suddenly many old people.
KINGSTON-UPON-HULL	*St. Mary's*	Deaths 65. Fever has been prevalent during the last quarter, 16 cases of which having been registered. 7 of these were cases of scarlatina.
———	*Myton*	Deaths 297. This return presents a great increase, the number of deaths this quarter exceeding that of the corresponding quarter of last year by 50, and the usual average by 31. One important feature relative to this return is, that 151 of the above number of deaths have occurred among children under 5 years of age; 75 of whom had not even completed their first year. Fever and scarlatina have been prevalent; 36 cases of the former, and 52 of the latter disease having terminated fatally. It is a fact worthy of serious consideration, that while during the year 1847, 901 births have been registered in this district, the deaths of 225 children under 1 year old have also been registered; thus showing that on an average nearly one-fourth of the children born in this district do not attain the first anniversary of their birth-day.
YORK	*Micklegate*	Deaths 93. Fever, 8; scarlatina, 10; influenza, 11.
———	*Bootham*	Deaths 131: being more than the average, which has been caused by the prevalence o fever.
———	*Walmgate*	Deaths 236: which is again a very large number, being more than double the average of the three preceding December quarters. In October, 61; in November, 52; in December, 99, exclusive of inquests. Scarlatina has been very fatal for the last six months, and 53 deaths have been registered this quarter from this cause alone; and 23 from fever. In December 13 were registered from influenza, and also many of aged people.
———	*Escrick*	Deaths 17: being above the average. They are principally of children. Croup has been prevalent; 6 of the deaths were from that cause.
———	*Dunnington*	Deaths 24: being above the average; 6 from scarlatina, and 3 from croup. Influenza has been very prevalent, but no cases were fatal.
SUNDERLAND	*East*	Deaths 101: being 44 more than in the corresponding quarter of the last year. Small-pox and typhus have been very prevalent. 26 deaths occurred from small pox, (all without previous vaccination,) and 9 from typhus.
———	*West*	Deaths 98: shewing an increase over the last quarter of 39, which is owing to the prevalence of small pox.
———	*Bishopwearmouth South*	Deaths 85: an increase of 12 as compared with the corresponding quarter of last year, owing to a large number (26) above 60 years of age, and 21 under one year. Only 5 cases of influenza.

SUP. REG. DISTRICT.	REG. DISTRICT.	
GATESHEAD	*Gateshead*	Deaths 168: this number is considerably above the average. There are 13 cases of typhus, and 69 deaths of children under 10 years of age.
———	*Whickham*	Deaths 51: greatly exceeding the average. Great numbers have died at an advanced age. Hooping cough has been very prevalent.
TYNEMOUTH	*Tynemouth*	Deaths 105: the diseases fatal have been principally scarlatina 11 deaths, typhus 7, chronic bronchitis 9, phthisis 6, enteritis 7, diarrhœa 5. The catarrhal complaint known as influenza has been very prevalent; a great accession of fevers of the typhoid type has also been observable originating amongst the vagrant Irish, and spreading through the poorer classes in the town of North Shields. Typhus has not been particularly fatal in proportion to the number of cases; one or two deaths from that cause have occurred amongst the middle classes: these typhoid fevers have been observed to exist in a marked degree in the vicinity of ill-cleansed courts, and stagnant filth. The marine village of Tynemouth (in this district) only presents 4 deaths this quarter.
———	*Blyth*	Deaths 40: influenza has prevailed here to a considerable extent, but not fatally, The deaths are below the usual number.
———	*Wallsend*	Deaths 17: rather below the average. The district is healthy.
NEWCASTLE-UPON-TYNE	*Saint Nicholas*	Deaths 227. This number is 81 above the last quarter, and 19 above the corresponding quarter of last year. Fever has been prevalent, but until the latter part of this quarter must not be considered as among the residents in the district. Here we have a fever house for the town and the vagrant ward; to both of which, the poor of other districts, infected with fever, have been transferred in great numbers during the last two quarters. Deducting the 65 persons registered as dying of fever in these places, the mortality among the resident population of the district will be 162 in this quarter. In many of the medical certificates, bronchitis, pneumonia, and diseases of a like character have appeared as secondary causes of death. Fever occurred in about 25 per cent. of the deaths in September quarter, and in this quarter it amounts to near 29 per cent. of the whole deaths. Of these 31 in the September quarter, and 45 in this quarter occurred in the fever house and vagrant ward. From this we may infer that the "imported Irish fever," is making its way amongst our resident population. 23 cases in this quarter have not been attended by a surgeon. This is to be ascribed to utter carelessness or indifference, as the district is well supplied with an excellent dispensary for the poor, an infirmary and attentive medical officers under the Poor-Law Act. It is a melancholy fact that a great many children are cut off ere they arrive at the age of 5 years. Those in this quarter amount to near one-third of the entire number of deaths.
———	*All Saints*	Deaths 324. The cause of the very great increase of deaths above the average of the same quarter (149·6) will appear from the following statement: 75 from typhus fever, 31 from hooping cough, 28 from small pox (all without vaccination) 10 from bronchitis, 7 from measles, 5 from influenza.
———	*Saint Andrew*	Deaths 115. The deaths this quarter are still above the average; without any epidemic prevailing, there are 25 deaths of persons above 60 years, and 10 of children who have died within a few days of birth.
———	*Byker*	Deaths 81. This is rather above the average. Typhus has proved fatal in 10 cases.
———	*Westgate*	Deaths 157. It will be seen by this statement that the number of deaths registered this quarter has been above the average; yet, on examination, it does not appear that there has been any particular prevailing disease. The deaths among old people and children have been on the increase.
CARLISLE	*Stanwix*	Deaths 21: 5 above the corresponding quarter of last year. Small pox is prevalent, but not fatal.
———	*Dalston*	Deaths 19: nine below the corresponding quarter of last year. There is no epidemic disease prevalent at present.
COCKERMOUTH	*Cockermouth*	Deaths 94: being above the average number. Typhus and scarlatina have been prevalent. 36 children have died of the latter disease, 24 of whom were under 5 years of age.
———	*Maryport*	Deaths 102: considerably above the average. 53 have been registered from scarlatina, but this disease is greatly abated.
PONTYPOOL	*Usk*	Deaths 16. Influenza prevailing very much, but not so many deaths have occurred as might be expected.
MERTHYR TYDFIL	*Merthyr Tydfil, Upper*	Deaths 207. Small pox and measles have both prevailed during the past quarter. 62 deaths have been caused by the former disease: 11 by the latter. Of the 62 arising from small pox, 3 occurred after previous vaccination; in 11 cases it was not known whether vaccination had or had not been performed, and in the remaining 48 it positively had not. In Dowlais, which constitutes more than half of this district, the disease has proved fatal principally to children and to young men and women who have recently come from the rural districts.
———	*Merthyr Tydfil, Lower*	Deaths 145. Small pox has prevailed all through the quarter, 23 having died of it; (2 had been vaccinated.) No cases of measles or scarlet fever have been registered, consequently the excess (for the numbers are above the average) must be attributed to a general increase in the usual diseases of the quarter.
———	*Aberdare*	Deaths 80: being 27 more than in the corresponding quarter of last year, caused partly by increase of population, and partly by small pox, of which there have been 16 fatal cases, (2 only having been vaccinated.)
WREXHAM	*Wrexham*	Deaths 82. Scarlatina and influenza have been prevalent. During this quarter there are 10 fatal cases of scarlatina, 2 of influenza, 6 of fever, and one of typhus.
HOLYWELL	*Mold*	Deaths 59: which is within a fraction of the average of the corresponding quarters of the last 10 years. The greatest number registered was in the December quarter 1839, viz., 80, and the lowest in 1845, viz., 32.
———	*Holywell*	Deaths 67. Small pox seems to be the most fatal of all the diseases this quarter, and caused 15 deaths.
———	*Flint*	Deaths 50: 19 less than in the corresponding quarter of 1846.
ANGLESEY	*Llanddausaint*	Deaths 36: Scarlatina is epidemic. Latterly influenza has been prevalent.

QUARTERLY METEOROLOGICAL TABLE,

Compiled from the Weekly Tables furnished to the Registrar General by the Astronomer Royal.

Deaths registered in London from Small Pox, Measles, Scarlatina, Hooping Cough, Typhus, Diarrhœa, Dysentery and Cholera, Influenza, Consumption, and other diseases of the Lungs; the numbers at each age, and the total deaths † (except violent and sudden) in each of the 14 weeks ending January 1st, 1848.*

1847 Week ending	Phases of the Moon	Mean height of the Barometer, from 12 daily observations, corrected and reduced to 32 deg. Fahrenheit	THERMOMETERS										In the Water of the Thames at Greenwich by the Self Registering Thermometer read at 9 o'Clock.		Difference between the dew point temperature and air temperature			Difference between the mean temperature of the week, and the mean temperature of the same week on an average of 25 years	WIND			The amount of Horizontal movement of the air in each week	Mean amount of Cloud, 0-10	Rain in inches (7 days)	Small Pox	Measles	Scarlatina	Hooping Cough	Typhus	Diarrhœa, Dysentery, and Cholera	Influenza	Phthisis or Consumption	Other diseases of the lungs	* Deaths at Three Ages, (exclusive of violent and sudden Deaths)			Deaths from all causes, (exclusive of violent and sudden deaths)
			Highest during the week	Lowest during the week	Mean: Of the Highest on each day, from 6 observations	Mean: Of the Lowest on each day, from 6 observations	Mean: Difference in degrees	Mean of 72 observations weekly	Dew Point: Mean of 72 results	Self-Registering: Highest in the sun: During the week	Self-Registering: Highest in the sun: Mean of 7 observations	Self-Registering: Lowest on the grass: During the week	Self-Registering: Lowest on the grass: Mean of 7 observations	MEAN. Of the highest on each day from 7 observations.	MEAN. Of the lowest on each day from 7 observations.	Mean of 72 differences	Mean of the greatest on each day, 6 observations	Mean of the least on each day, 6 observations		General direction	Greatest pressure in the week	Mean for the week											0 to 15	15 to 60	60 and upwards	
		inches	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o				miles														
Oct. 2nd	Last qr., Oct. 1st	30.095	65.8	33.5	60.3	44.2	16.1	51.7	45.0	82.8	77.4	24.0	35.5	55.0	54.8	6.7	12.9	2.1	—2.5	E.	2.3	0.0	540	6.8	0.00	18	47	50	19	79	73	2	121	106	467	357	175	999
,, 9th	New, ,, 9th	29.644	65.0	38.0	61.0	45.7	15.3	53.0	49.1	79.3	72.7	32.0	40.9	54.1	54.0	3.9	10.6	0.5	—0.4	Variable	1.0	0.0	735	7.8	0.72	28	52	58	19	79	57	1	105	110	483	313	189	985
,, 16th	——	29.749	73.0	45.5	62.2	49.5	12.7	54.8	51.6	91.2	72.7	35.5	43.7	54.5	54.3	3.2	8.7	0.5	+3.3	Variable	2.5	0.0	515	8.5	0.05	20	56	55	15	93	39	—	113	111	415	316	201	933
,, 23rd	1st qr., ,, 17th	29.617	65.0	42.5	59.5	46.9	12.6	53.5	49.5	75.9	70.4	31.0	38.3	53.8	53.7	4.0	9.1	0.7	+3.3	S.S.W.	9.0	0.4	1215	6.0	1.04	42	54	42	14	78	37	—	113	120	461	312	166	943
,, 30th	Last qr. ,, 30th	30.145	60.6	35.2	55.1	44.2	10.9	49.8	45.9	75.8	62.3	26.5	37.8	51.3	50.0	3.9	8.5	1.0	+2.5	S.S.W.	3.5	0.1	760	7.8	0.28	28	43	61	12	73	33	1	116	127	462	299	164	925
Nov. 6th	——	30.077	62.0	43.8	55.0	46.6	8.4	50.5	49.2	—	—	37.5	43.9	51.1	51.0	1.3	3.5	0.3	+4.4	S.W.	4.0	0.0	560	7.6	0.39	26	71	64	25	80	37	2	118	163	535	310	189	1034
,, 13th	New, Nov. 8th	29.941	62.5	37.5	55.8	43.1	12.7	49.8	46.7	—	—	27.0	36.2	50.6	50.4	3.2	7.0	1.0	+6.1	S.S.W.	5.5	0.3	1025	6.7	0.03	42	58	71	17	68	28	4	121	178	531	319	209	1059
,, 20th	1st qr. ,, 15th	30.119	57.8	26.7	45.8	35.9	9.9	40.7	37.1	—	—	18.0	31.3	47.8	46.9	3.6	6.8	1.3	—1.8	S.W.	8.0	0.3	860	6.4	0.14	26	76	69	24	86	26	4	108	185	560	320	179	1060
,, 27th	Full, ,, 22nd	29.618	56.5	39.0	51.6	41.8	9.8	46.5	43.8	—	—	29.0	36.2	44.4	42.9	2.7	5.4	0.8	+5.0	S.S.W.	8.5	0.4	1135	8.5	0.85	29	96	49	44	87	39	36	153	481	758	501	382	1641
Dec. 4th	Last qr., ,, 29th	29.820	57.2	37.5	52.7	41.1	11.6	47.9	45.1	—	—	28.5	33.2	44.5	44.3	2.8	5.3	0.2	+4.7	S.W.	8.0	0.5	1560	7.4	0.71	27	89	63	65	132	33	198	198	796	1001	702	716	2419
,, 11th	New, Dec. 7th	29.304	56.1	34.5	50.2	41.5	8.7	46.7	42.6	—	—	25.0	34.2	43.9	42.9	4.1	6.7	1.7	+6.4	S.S.W.	12.5	1.9	1840	7.1	0.58	22	69	45	71	136	28	374	192	721	1000	675	692	2367
,, 18th	1st qr., ,, 15th	29.752	54.5	40.1	52.6	43.9	8.7	48.0	45.2	—	—	27.0	37.1	44.9	44.5	2.7	5.4	1.1	+7.9	S.	5.0	0.7	1285	7.0	0.09	17	75	36	36	131	35	270	148	509	787	524	550	1862
,, 25th	Full, ,, 21st	29.651	41.5	31.8	37.7	33.4	4.3	35.4	32.0	—	—	22.0	29.5	42.4	40.0	3.4	5.4	1.9	—4.2	Calm	1.5	0.0	295	9.6	0.03	18	37	41	28	83	15	142	111	280	558	355	264	1178
Jan. 1 (1848).	Last qr., ,, 29th	29.872	40.4	26.5	37.8	32,1	5.7	34.8	33.2	—	—	19.3	27.0	36.9	36.1	1.5	3.5	0.2	—2.1	Very Variable	1.5	0.0	—	9.7	0.28	28	58	43	37	74	23	127	156	341	719	483	284	1486
Mean, Highest, or Lowest, of the 14 weeks.	——	29.815	73.0	26.5	52.7	42.1	10.6	47.4	44.0	—	—	18.0	36.1	48.2	47.6	3.4	7.1	1.0	+2.3	——	12.5	0.3	950	7.6	5.19	372	881	747	426	1279	503	1161	1873	4228	8740	5783	4360	18891

* The ages of 5 were not specified in the Table.

† Deaths enumerated under the heads "violent" and "sudden," chiefly consist of cases returned by the Coroner, many of which are registered, not when they occur, but at uncertain periods; and they are therefore excluded from this comparison of weeks.

REMARKS ON THE WEATHER DURING THE QUARTER ENDING DECEMBER 31st, 1847.

By James Glaisher, Esq., of the Royal Observatory, Greenwich.

THE weather during the past Quarter has been very remarkable in many respects. The daily temperatures of the Air, Evaporation, and Dew-Point, during the whole Quarter, with the exceptions of the period between November 17 and November 21, and between December 20 and December 31, have been above the average for the season, and at times the departure has been very great.

It may perhaps tend to clearness if I speak of each subject of investigation separately.

The Mean Temperature of the Air at Greenwich

For the month of October was 52°9, which is 4°1, 7°5, 4°9, 3°4, 2°7, and 2°4 *above* those in the years 1841 to 1846 respectively. The high temperature in this month is very remarkable.

For the month of November was 46°9, which is 4°2, 4°1, 3°1, 2°9, 1°1, and 0°9, *above* those of the years 1841 to 1846 respectively.

For the month of December was 42°8, which is 2°3 *above* that of 1841, 2°2 *below* that of 1842, 1°1 *below* that of 1843, 9°8 *above* that of 1844, 1°1 *above* that of 1845, and 9°9 *above* that of 1846, or it is 3°3 above the average for these six years.

The mean value for the Quarter was 47°5; that for 1841 was 44°0; for 1842 was 44°4; for 1843 was 45°2; for 1844 was 42°2; for 1845 was 45°9; and for 1846 was 43°1; so that the excess for this Quarter above the corresponding Quarter in the six preceding years is 3°5, 3°1, 2°3, 5°3, 1°6, and 4°4 respectively, or it is 3°4 *above* the average for these six years. This excess is very large indeed, considering that it extends over so long a period of time as one-fourth part of a year.

The Mean Temperature of Evaporation at Greenwich

For the month of October was 50°9, which is 3°6 *above* that for the preceding six years.

For the month of November was 45°6, which is 2°6 *above* that for the preceding six years.

For the month of December was 41°6, which is 3°3 *above* that for the preceding six years.

The mean value for the Quarter was 46°0, which is 3°2 *above* that for the six preceding years.

The Mean Temperature of the Dew-Point at Greenwich

For the month of October was 49°1, which is 4°0, 6°7, 4°4, 3°1, 2°6, and 1°9 *above* that for the years 1841 to 1846 respectively, or it is 3°7 *above* the average for these years.

For the month of November was 44°1, which is 4°3, 3°7, 3°2, 2°2, 1°3, and 1°0 *above* that for the years 1841 to 1846 respectively, or it is 2°6 *above* the average for these years.

For the month of December was 39°8, which is 4°6 *above* that for 1841, 3°4 *below* that for 1842, 2°2 *below* that for 1843, 9°8 *above* that for 1844, 2°2 *above* that for 1845, and 10°4 *above* that for 1846, or it is 3°6 *above* the average for these years.

The mean value for the Quarter was 44°3, which is 3°3 *above* that for the six preceding years.

The mean weight of water in a cubic foot of Air for the Quarter was 3.2 grains, which is 0.4 grain *above* that for the preceding six years.

The additional weight of water required to saturate a cubic foot of air was 0.4 grain; the average for the preceding six years was 0.3 grain.

The mean degree of humidity of the atmosphere for the Quarter was 0.900, which is the same as that for the six preceding years.

The mean elastic force of vapour for the Quarter was 0.310 inch, which is 0.030 inch *above* the average for the six preceding years.

The mean reading of the Barometer at Greenwich for the Quarter was 29.829 inches, which is 0.111 inch *above* the average of the six preceding years.

The average weight of a cubic foot of air under the average temperature, humidity, and pressure, was 540 grains; the average for the six preceding years was 543 grains.

The rain fallen at Greenwich within the Quarter was six inches in depth; this quantity is two inches *less* than the average for the six preceding years. The total amount of rain fallen in the year 1847 was 17.6 inches, which nearly eight inches *less* than the average amount for the six preceding years.

The temperature of the Thames Water was 48°2 by day, and 47°6 by night. The water, on an average, was nearly of the same temperature as the Air.

The horizontal movement of the Air was about 950 miles weekly, being somewhat less than the average amount.

The highest and lowest Readings of the Thermometer in Air at the height of four feet above the ground, and protected as much as possible from the effects of radiation and rain, were 73°2 and 24°5.

The average daily range of the Readings of Thermometers in Air at the height of four feet, was 11°7, which is 3°8 *greater* than the average range for the six preceding years.

In October the *Readings of the Thermometer on grass* were at or below 32° on five nights, and the lowest reading was 26°5. In November it was below 32° on thirteen nights, and the lowest reading was 18°. In December it was below 32° on sixteen nights, and the lowest reading was 19°3. The periods of time, however, during which these readings have continued were very short, owing to the very cloudy state of the sky during the nights. The amount of heat radiated from the earth at night during the past quarter was very small indeed.

The mean amount of cloud during the Quarter was such as to cover upon the average a little more than three-fourths of the whole sky. The month of December was more clouded than any month since January, 1845.

It is a fact well worthy of notice, that from the beginning of this quarter till the 20th of December, the *electricity of the atmosphere* was almost always in a neutral state, so that no signs of electricity whatever were shown for several days together by any of the electrical instruments. During this period I several times minutely examined the whole of the electrical apparatus, and always found it in a satisfactory state. On the above day, and on every day afterwards till the end of the quarter, active electricity was shown.

The approximate mean monthly temperatures for other places besides Greenwich are shown in the subjoined tables, and they differ but little in each month from those at Greenwich. In the comparison between places situated at different elevations, there is one leading difference in respect to temperature which we must expect to find, viz., that at the places of a higher level, a lower mean temperature, and a greater range of temperature take place, than at places situated at a lower level. These conditions are very clearly shown in the subjoined tables.

The monthly mean temperatures of the places in Cornwall and Devonshire, in each of these three months, were somewhat *above* those at other places. At Exeter, however, the difference in this respect from those in other counties is small; in fact, the weather at this place during the past quarter has more nearly resembled that of places out of these counties than that of places situated within them.

The remarkably cold period referred to above, which happened between November 17 and November 21, periods of so different temperature, deserves particular notice. As far as I can infer from the Meteorological returns from the country, it seems to have been general. Snow, to a considerable depth, fell within this period in Suffolk; but it is not noticed as having fallen elsewhere. The particulars of the changes of temperature in the months of November and December I have detailed in the Weekly Reports for December. I may here remark, however, that during these two months the usual diurnal rise and fall of the temperatures of the Air and of the Dew-Point very frequently did not take place, and they were often reversed, a nocturnal rising temperature, and a daily falling temperature, being of frequent occurrence.

As might be expected from these anomalous changes of temperature, the usual diurnal difference in the readings of the barometer did not take place. The readings, at times, constantly *increased* for several days together, and then *decreased* for several days together. In December, on the 7th day, at 3^h a.m., the

remarkably low reading of 28.383 inches took place at Greenwich; and this low reading was general over the country, but it first took place at northern places, and then at southern; thus the minimum occurred at Durham on December 6, at 6 p.m., and it was 27.89 inches; at Stonyhurst, during the evening, and it was 27.841 inches; at Liverpool, at 10^h p.m., and it was 28.184 inches; at Cambridge, on December 7th, at 1^h 30^m a.m., and it was 28.382 inches; and at Greenwich, on December 7, at 3^h a.m., and it was, as stated above, 28.383 inches. A reading so low as this is of rare occurrence. The previous instances at Greenwich are as follows:—In 1783, on March 6, the reading was 28.12 in.; in 1809, on December 17, the reading was 28.20 in.; in 1821, on December 25, the reading was 27.89 in.; in 1824, on November 23, the reading was 28.37 in.; and in 1843, on January 13 the reading was 28.10 in.

During the quarter there were eight exhibitions of the Aurora Borealis, which occurred on the following days:—October 15, 23, and 24; November 1, 2, and 19; December 2, and 19. That on October 24 was one of the finest I have seen (see the Philosophical Magazine for November, and the Athenæum for November). At every one of these times the magnets were much disturbed. The magnetic disturbance connected with the Aurora of October 24 exhibited, a greater amount of consecutive disturbance than had been before experienced at Greenwich, since the establishment of the Magnetic Observatory in 1840. (See the Philosophical Magazine for January, 1848, and a forthcoming account of the Auroræ seen in Cambridge, by Mr. Morgan, of the Cambridge Observatory.)

From the preceding remarks it will be seen that the weather during the past quarter has been very unusual indeed. I have searched all Meteorological records at my command, which have been made in the previous fifty years, and I have failed to find any season of similar character. In the year 1806 the average temperature for the last quarter of the year was 50°1 (see Philosophical Transactions for that year), and this result nearly agrees with that found by Luke Howard, Esq. (see his climate of London), which was 50°3; but although this value is greater than that of the past three months, yet I am inclined to think that the temperature of that period in 1806 did not really exceed that of 1847, as at that time all mean temperatures depended solely on uncompared self-registering thermometers, and it is found that even with good self-registering thermometers a subtractive correction is always required to deduce from them the true mean for the month. The only October in this century whose temperature seems really to have exceeded that of the past October, is that of 1811. So that whether we compare the weather of the past quarter by longer or shorter periods with weather of similar kind in past years, the character which it exhibits is rare and remarkable.

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING DECEMBER 31, 1847.

Compiled from Observations furnished by the Gentlemen whose names are mentioned in the first column, the Hygrometrical results having been deduced from Glaisher's Hygrometrical Tables.

Year 1847 / Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Average daily range of the Thermometer readings	Range of the Thermometer in the month	WIND: Average strength 0—6	General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	Amount in inches	Deductions relative to the Humidity of the Atmosphere: Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	Height of the station above the Sea in feet	Daily Observations taken at	REMARKS
	° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		in.	gr.			
HELSTON,	Oct.	50·7	5·18 W.	29·822	0·434	29·388	56·4	55·3	54·4	....	65·0	45·0	58·8	51·5	55·1	7·3	20·0	0·8	S.W.	7·0	14	5·4	3·9	4·3	0·933	6·0	530	106	9 A.M.	Oct. 6, 9, 10, 13, 16;
M. P. Moyle, Esq.	Nov.	....	....	29·914	0·366	29·549	51·8	50·6	49·4	....	62·0	30·0	54·8	44·0	49·5	10·8	32·0	1·2	S.W.	6·4	15	6·4	4·2	0·4	0·922	5·1	537	....	3 P.M.	Nov. 11, 15, 25, 27;
	Dec.	....	....	29·708	0·306	29·402	46·7	45·5	44·2	....	57·0	29·0	50·1	41·1	45·6	9·0	28 0	1·5	S.W.	7·1	24	5·8	3·5	0·3	0·919	4·2	539	....	9 P.M.	Dec. 2, 3. The air was saturated with moisture.
TRURO,	Oct.	50·17	5·4 W.	29·959	....	....	....	....	....	....	62·0	44·0	58·7	50·9	54·8	7·8	18 0	0·8	S.W.; E.	7·8	20	5·8	....	....	....	....	....	....	9 A.M.	
Dr. C. Barham.	Nov.	....	....	30·033	....	....	....	....	....	....	60·0	32·0	54·7	45·6	50·1	9·1	28·0	0·8	N.; S.W.	6·6	18	4·4	....	....	....	....	....	....	3 P.M.	
	Dec.	....	....	29·859	....	....	....	....	....	....	56·0	30·0	49·3	42·2	45·7	7·1	26·0	0·9	S.S.W.	7·4	23	8·4	....	....	....	....	....	....	9 P.M.	
TORQUAY.	Oct.	,,	,,	29·84	0.377	29·463	54·9	52·7	50·5	....	64·0	43·0	58·6	51·0	54·9	7·6	21·0	2·3	S.W.	8·0	16	6·7	4·3	0·9	0·859	5·2	533	120	9 A.M.	Evaporation— sun 2·80 | shade 0·61
Edward Vivian, Esq.	Nov.	....	....	29·91	0·329	29·581	48·5	47·5	46·3	....	62·0	32·0	53·9	46·2	50·0	7·7	30·0	2·2	S.W.	6·2	11	2·1	3·8	0·3	0·928	4·6	540	....	.....	omitted
	Dec.	....	....	29·70	0·278	29·422	44·9	43·5	41·4	....	56·0	31·0	48·1	41·4	14·8	6·7	25·0	2·6	N.E.	7·6	16	4·9	3·2	0·4	0·882	3·9	540	....	.....	1.71 | 1·24
EXETER,	Oct.	50·45	3·41 W.	29·77	0·373	29·397	51·3	52·1	50·0	....	67·0	38·0	59·0	48·3	53·6	10·7	29·0	1·0	S.	8·0	21	6·9	4·3	0·6	0·875	5 2	532	140	9 A.M.	Oct. 15, aurora.
Dr. Shapter.	Nov.	....	....	29·85	0·312	29 538	48·1	46·6	44·8	....	61·5	25·0	50·2	41·1	45·6	9·1	36·5	0·0	N.	7·5	18	2·6	3·6	0·3	0 895	4·3	539	....	.....	Nov. 7, 8, storm.
	Dec.	....	....	29 68	0·266	29·414	43 7	42·0	40·3	....	58·5	27·2	47·7	37·4	42·5	10 3	31·3	1·5	E.	8·0	19	4·8	3·1	0·4	0·892	3·7	542	....	.....	Dec. 17, storm.
BRIGHTON, BLACK ROCK,	Oct.	50·50	0·9 W.	29·929	0·414	29·515	53 5	53·3	53·1	....	64·0	36·0	57·5	47·7	52·6	9·8	28·0	....	S.W.; N.E.	6 3	15	..	4·7	0·1	0·990	5·7	535	60	9 A.M.	
J. O. N. Rutter, Esq.	Nov.	....	....	30·010	0·275	29·735	45·9	43·8	41·0	....	59·0	31·0	49·2	43·0	46·1	6·2	28·0	....	S.W.; N.E.	6·9	15	..	3·2	0·4	0·846	3·8	546	....	3 P.M.	
	Dec.	....	....	29·837	0·245	29.592	41·7	40·1	38·6	....	53·0	29·0	43·2	40·5	41·9	2·7	21·0	....	S.E.; N.E.	7·6	19	..	2·8	0·2	0·886	3·3	548	....	9 A.M.	
CHICHESTER,	Oct.	50·50	0·46 W.	29·963	....	....	....	....	....	48·3	67·0	33·0	58·7	46·7	52·7	12·0	34·0	....		..	....	2·3	....	....	....	....	....	....	9 A.M.	
Wm. Hills, Esq., Curator of	Nov.	....	....	30·020	....	....	....	....	....	44·5	60·0	27·0	51·8	40·0	45·9	11·8	33·0	....		..	....	2·5	....	....	....	....	....	....	9 P.M.	
Philosophical Institution.	Dec.	....	....	29·829	....	....	....	....	....	38 9	53·0	26·0	45·6	35·6	10·6	10·0	27·0	....		..	....	4·0	....	....	....	....	....	....	.....	
UCKFIELD,	Oct.	50·59	0·5 E.	29·883	0·372	29·511	53·8	51·8	49·9	50·0	71·0	28·0	61·9	45·1	53·5	16 8	43·0	....	W.	..	13	1·6	4 2	0 5	0·873	5·1	535	180	9 A.M.	Evaporation— 1·8 inches
C. L. Price, Esq., Surgeon.	Nov.	....	....	29·939	0·294	29·645	46·6	45·0	43·1	43·1	64·0	24·0	52·7	40·5	46·6	12·2	40·0	....	S.W.	..	13	2·1	3·4	0·4	0·896	4·0	544	....	9 P.M.	1·5
	Dec.	....	....	29·832	0·250	29·582	42·0	40 5	38·4	38·3	56·0	28·0	45·6	36·9	41·3	8·7	28·0	....	S.W.	..	13	2·5	2·9	0·4	0·890	3·5	546	....	.....	1·2
BECKINGTON,	Oct.	51·24	2·22 W.	29·72	0·373	29·347	52·4	51·3	50·0	....	69·0	25·0	57·5	38·2	17·8	9·3	44·0	1·5	W.	7·0	17	6 0	4·3	0·3	0·934	5·1	529	265	9 A.M.	
Rev. C. Blathwayt, A.M.	Nov.	....	....	29·76	0·303	29·457	46·0	45·6	43·9	....	61·0	14·0	52·0	32·0	42·1	20·0	47·0	1·4	W.; S.W.	5·6	14	1·9	3·5	0·3	0·931	4·2	536	....	3 P.M.	
	Dec.	....	....	29·58	0·264	29·316	40·1	40.1	40·0	....	55·0	22·0	44·7	35·9	40·2	8·8	33·0	1·3	W.; S.	7·5	16	4·8	3·1	0·0	1·000	3·6	543	....	9 P.M.	
GREENWICH OBSERVATORY.	Oct.	51·31	0·0	29·803	0·361	29·442	52·9	50·9	49·0	49·1	73 2	33 0	60·3	46·4	53·3	14·0	40·2	....	S.S.W.	7·6	....	2·0	4·1	0·6	0·873	5·0	533	159	Every	
The Astronomer Royal.	Nov.	....	....	29·905	0·302	29·603	46·9	45·6	43·9	44·1	66·3	24·5	50·0	38·6	44·3	11·4	41·8	....	S.S.W.; W.S.W.	7·0	....	2·0	3·5	0·4	0·901	4·2	542	....	2	
	Dec.	....	....	29·778	0·263	29·515	42·8	41·6	40·0	39·8	59·5	25·0	46·2	36·5	41·1	9·7	34·5	....	S.W.; S.	8 3	....	2·0	3·1	0·2	0·904	3·6	544	....	hours	
MAIDENSTONE HILL, GREENWICH,	Oct.	51·31	0·0	29·873	0·355	29·518	51·7	50·2	48·5	....	65·7	38·1	58·9	47·4	53·2	11·5	27·3	light	N.E.; S.W.	7·4	13	2·0	4.1	0·5	0·897	4·9	536	107	8 A.M.	
Mr. William Ellis,	Nov.	....	....	29·930	0·307	29·623	46·1	45·2	44·2	....	61·4	26·9	51·2	42·0	46·6	9·2	34·5	....	S.W.	7 5	14	2·0	3·5	0·2	0·938	4·3	544	....	6 P.M.	
	Dec.	....	....	29·767	0·255	29·512	41·8	40·5	38·9	....	58·4	27·9	45·5	38·1	41·8	7·4	30·5	....	S., S.W.; N.	7·8	15	2·1	3·0	0.3	0·906	3·5	546	....	.....	

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING DECEMBER 31, 1847.—(*continued.*)

Year 1847 / Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering — Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Average daily range of the Thermometer readings	Range of the Thermometer in the month	WIND — Average strength 0—6	WIND — General Direction	Amount of Clouds 0—10	RAIN — Number of days on which it fell	RAIN — Amount in inches	Deductions relative to the Humidity of the Atmosphere — Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	Height of the Station above the Sea in feet	Daily Observations taken at	REMARKS
	° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		gr.	gr.			
LEWISHAM,	Oct.	....	....	....	0·361	....	53·1	51·0	49·0	....	69·0	33·0	60 6	46·4	53·5	14·2	36·0	....	S.W.	7·0	....	..	4·1	0·6	0·873	5·0	....	40	7·20 A.M.	
James Glaisher, Esq.	Nov.	....	....	....	0·294	....	46·0	41·7	43·0	....	61·0	24·0	52·0	40·4	46·2	11·6	37·0	....	S.W.	7·0	....	..	3·4	0·4	0·904	4·0	....	....	3·20 P.M.	
	Dec.	....	....	....	0·250	....	42·3	40·7	38·6	....	56·5	26·5	46·2	36·9	41·6	9·3	30·0	....	S.W.	8·0	....	..	2·9	0·4	0·873	3·5	....	....	7·20 P.M.	
WALWORTH,	Oct.	51·31	0·6 W.	29·801	0·337	29·464	51·0	49·0	47·0	....	70·0	34·0	60·7	48·1	54·4	12·6	36·0	3.2	S.E.; S.W.	5·1	15	1·5	3·9	0·6	0·871	4·7	534	32	9 A.M.	
W. H. White, Esq.	Nov.	....	....	29·889	0·302	29·587	48·5	46·5	43·8	....	62·0	27·0	52·1	44·0	48·0	8·1	35·0	1·7	S.W.	6·3	16	1·5	3·5	0·5	0·885	4·2	510	....	9 P.M.	
	Dec.	....	....	29·704	0·243	29·461	42·0	40·1	37·6	....	56·0	30·0	46·0	40·1	43·0	5·9	26·0	3·8	E.; S.W.	7·6	17	1·2	2·8	0·5	0 858	3·3	544	....	.....	
LATIMER RECTORY, near CHESHAM, BUCKS,	Oct.	51·41	0·33 W.	29·618	....	....	....	....	....	....	70·0	29·0	59·2	43·5	51·3	15·7	11·0	....	N.E.; S.W.	..	15	2·9	....	....	....	....	....	300	9 A.M.	
	Nov.	....	....	29·657	....	....	....	....	....	....	62·0	23·0	51·0	37·3	44·1	13·7	39·0	....	S.E.; S.W.	..	20	1·8	....	....	....	....	....	....	....	
Rev. Samuel King.	Dec.	....	....	29·504	....	....	....	....	....	....	54·0	25·0	43·8	33·7	38·7	10·1	29·0	....	W.; S.E.; N.E.	..	18	4·1	....	....	....	....	....	....	.....	
AYLESBURY,	Oct.	51·49	0·44 W.	29·641	0·356	29·288	52·9	50·4	48·2	....	68·0	32·0	58·3	44·4	51·4	13 9	36.0	0·3	E. by S.	7·6	12	1·0	4·0	0·7	0·837	4·9	531	280	9 A.M.	
Thomas Dell, Esq.	Nov.	....	....	29·764	0·309	29 455	45·6	41·7	43·7	....	61·0	28·0	51·6	38·5	45·1	13·1	38·0	0·4	S.S.W.	6·6	13	2·0	3·6	0·3	0·940	4·3	542	....	.....	
	Dec.	....	....	29·421	0·259	29·192	40·5	39·6	38·3	....	55·0	27·0	45.3	35·7	40·5	9·6	28·0	1·9	S.	8·1	14	2·8	3·0	0·2	0·930	3·7	543	....	.....	
HARTWELL, near AYLESBURY,	Oct.	51·49	0·51 W.	29·641	0·371	29·273	53·0	51·1	49·5	....	72·0	29·0	59·4	43·8	51·6	15·6	43·0	1.1	N.E.; S.W.	6·6	....	2.8	4·2	0.5	0·857	5·1	531	300	9 A.M.	
Mr. Horton, Assistant to Dr. Lee.	Nov.	....	....	29·650	0·304	29·346	45·0	41·3	43·1	....	66·0	21·0	53·8	36·4	45·1	17·4	45·0	1.0	S.W.	7·1	....	1·8	3·3	0·2	0·902	4·2	540	....	5 P.M.	
	Dec.	....	....	29·284	0·260	29·024	41·3	40·2	38·8	....	56·0	27·0	46·8	34·5	40·6	12·3	29 0	1 4	S.W.	7·5	....	2·4	3·0	0·3	0·897	3·6	545	....	.....	
STONE OBSERVATORY.	Oct.	....	....	29·538	0·384	29·154	52·2	51·5	50·5	....	68 5	37·0	58·0	46·2	52·1	11·8	31.5	1·1	S.W.; S.W.	7·6	11	3 7	4·3	0·3	0·953	5·3	529	....	9 A.M.	
M. Fasel, Assistant to Rev. J. B. Reade.	Nov.	....	....	29·623	0·291	29·332	44·5	43.8	42·7	....	61·0	23·0	50·5	37·0	43·8	13·5	38·6	1·2	S.W.	6·6	14	1·9	3·5	0·3	0·947	4 0	538	....	9 P.M.	
	Dec.	....	....	29·455	0·243	29·212	39·9	39·1	37·8	....	55·8	26·8	44·5	35·0	39·5	9·5	29·0	1·5	S.W.; N.E.	7·9	15	2·4	2·9	0·2	0·921	3·3	543	....	.....	
SAFFRON WALDEN,	Oct.	52·2	0·15 E.	29·92	0·366	29·554	57·0	53·0	49·4	....	69·0	31·0	58·0	47·0	53·5	11·0	38·0	2·5	S.W.	·5	14	2·1	4·1	1·2	0·775	5·1	532	....	3 P.M.	Amount of rain during the year, 19·3 inches.
T. Spurgen, Esq.	Nov.	....	....	29·88	0.264	29·616	49·5	45·0	39·9	....	61·0	31·0	51·0	41·0	46·5	10·0	30·0	2·3	S.W.	·4	11	1·2	3·0	1·0	0·720	3·6	540	....	.....	
	Dec.	....	....	29·71	0·211	29·499	43·0	39·0	33·6	....	56·0	30·0	44·0	36·0	40·5	8·0	26·0	3·0	S.	·7	15	2·7	2·5	1·0	0·718	2·9	542	....	.....	
POOL COTTAGE, HEREFORD,	Oct.	52·4	2·34 W.	29·42	....	....	54·2	....	....	....	....	....	....	....	....	....	....	....	S.; N.E.; S.W.	..	17	6·6	....	....	....	....	....	....	NOON	Evaporation—
J. Pendergrass, Esq.	Nov.	....	....	29·51	....	....	50·0	....	....	....	....	....	....	....	....	....	....	....	S.; S.W.; N.W	..	9	1·8	....	....	....	....	....	....	.....	3·6 inches
	Dec.	....	....	29·43	....	....	43·0	....	....	....	....	....	....	....	....	....	....	....	S.; S.W.; N.E.	..	12	5·4	....	....	....	....	....	....	.....	1·8 1·4
CARDINGTON, near BEDFORD,	Oct.	52·7	0·25 W.	29·85	0·344	29 506	50·9	49·3	47·6	....	66·0	31·0	57·5	44·3	50·9	13·2	35·0	....	S.W. & N.E.	7·0	10	2·6	3·9	0·5	0·888	4·8	537	....	9 A.M.	In Dec. the amount of rain collected in a gauge 50 feet above the soil was 2 inches.
Mr. Maclaren, Gardener to S. C. Whitbread, Esq.	Nov.	....	....	29 90	0·290	29·610	45·2	44·0	42·7	....	60·0	25·0	49·7	38·1	13·9	11·6	35·0	....	S.W.	6·1	13	1·5	3·4	0·3	0·911	4·0	544	....	&	
	Dec.	....	....	29·72	0·245	29·475	40·5	39·5	38·1	....	56·0	26·0	44·0	35·2	39·6	8·8	30·0	....	S.W.; N.E.; S.E.	7·3	13	2·2	2·9	0·2	0·921	3·3	547	....	9 P.M.	
THWAITE.	Oct.	52·8	1·16 E.	....	....	....	....	....	....	....	72·0	34·0	....	....	....	....	38·0	0·6	S.W.	..	9	2·4	....	....	....	....	....	200	.....	Much snow fell on Nov. 17, and on Dec. 30, on the former occasion it was very deep N. of Thwaite, and on the latter W.S.W. of Thwaite
Orlando Whistlecraft, Esq.	Nov.	....	....	....	....	....	....	....	....	....	63·0	29·0	....	....	....	....	34·0	0·5	S.W. & S.	..	12	1 9	....	....	....	....	....	....	.....	
	Dec.	....	....	....	....	....	....	....	....	....	57·0	32·0	....	....	....	....	25.0	0·7	S.W.; S.E.; N.E.	..	9	2·4	....	....	....	....	....	....	.....	

MONTHLY METEOROLOGICAL TABLE, FOR THE QUARTER ENDING DECEMBER 31, 1847.—(*continued.*)

	Year 1847 Months	Latitude	Longitude	Mean height of Barometer reading corrected and reduced to 32°	Mean elastic force of Vapour	Mean Pressure of the Atmosphere of Dry Air	THERMOMETERS: Dry Bulb — Mean of daily Observations	Wet Bulb — Mean of daily Observations	Temperature of the Dew Point — Deduced	Temperature of the Dew Point — Observed	Self-registering: Highest during the month	Lowest during the month	Mean of the highest on each day	Mean of the lowest on each day	Approximate mean temp. of the month	Average daily range of the Thermometer readings	Range of the Thermometer in the month	WIND: Average strength 0—6	WIND: General Direction	Amount of Clouds 0—10	RAIN: Number of days on which it fell	RAIN: Amount in inches	Deductions relative to the Humidity of the Atmosphere: Mean weight of Vapour in a cubic foot of Air	Mean additional weight of Vapour required to saturate a cubic foot of Air	Mean degree of Humidity	Mean quantity of Water in a vertical column of Atmosphere	Weight of a cubic foot of Air	Height of the station above the Sea in feet	Daily Observations taken at	REMARKS
		° ′	° ′	in.	in.	in.	°	°	°	°	°	°	°	°	°	°	°					in.	gr.	gr.		in.	gr.			
CAMBRIDGE OBSERVATORY. *John H. Morgan, Esq.*	Oct.	52·13	0·6 E.	29·922	0·369	29·553	54·4	51·8	49·7	....	70·9	31·3	60·3	44·3	52·3	16·0	39·6	0·8	Calm.	8 0	14	1·2	4·1	0·8	0·834	5·1	534	88	9 A.M.	On Dec. 7th at 1 h. 30 m. A.M. the Barometer reading was 28·382 inches.
	Nov.	....	....	29·988	0·302	29·686	47·4	45·8	43·8	....	61·9	26·2	52·0	39·0	45·4	13·0	35·7	0·9	Calm.	7·0	14	1·5	3·4	0·4	0·898	4·2	544	....	3 P.M.	Auroræ Boreales were seen on Oct. 24 Nov. 1, 2, 19, and Dec. 2, 19.
	Dec.	....	....	29·814	0·253	29 561	42·4	40·9	38 8	....	57·1	29·2	46·2	35·4	40·7	10·8	27·9	1.3	s.	8·0	12	2·7	3·0	0 4	0·890	3·5	546	....	.....	
DRUMINARGAL HOUSE, SCARVA, IRELAND, *John Aldons, Esq.*	Oct.	54·18	6·20w.	.....	0·328	.....	49·9	48·2	46 2	....	64·0	37·2	55·0	45·4	50·2	9·6	26 8	1·4	S.W. ; S.	6·3	13	3·3	3·8	0·5	0·882	4·5	....	....	9 P.M.	It was stated that three observations were taken daily, and the times are assumed to have been as stated in last column.
	Nov.	....	....	.....	0·297	.....	46·5	45·0	43·3	....	58·3	31·2	49·7	37·1	43·4	12·6	27·1	1·3	S.W.	6·1	18	3·5	3·4	0·4	0·900	4·2	....	....	3 A.M.	
	Dec.	....	....	.....	0·268	.....	42·4	41·5	40 2	....	57·5	23·3	45·8	37·3	41·5	8·5	34·2	1·5	S.	8·3	19	5·6	3·1	0·2	0·927	3·7	....	....	9 P.M.	
NORWICH. *William Brooke, Esq.*	Oct.	52·37	1·16 E.	29·917	0·353	29·564	53·2	50·8	48·4	....	64·0	35·0	56·8	46·3	51·5	10·0	29·0	....	S. S.W. ; S.E.	..	11	2·1	4·0	0·7	0·850	4·8	536	39	Barom. 10 a.m. 2 p.m.	
	Nov.	....	....	29 988	0·301	29·687	47·7	45·8	42·9	....	59·0	31·0	49·1	41·0	45·0	8·0	28·0	....	W. ; S.W.	..	16	1·8	3·5	0·5	0·873	4·2	542	....	Therm. 9 a.m.	Evaporation— 2·5 in.
	Dec.	....	....	29·834	0·243	29·591	42·0	40·0	37·6	....	54·0	32·0	43·0	37·0	40·0	6·0	22·0	....	S.E. ; N.E.	..	13	2·5	2·8	0·5	0·845	3·3	546	....	Noon 3 p.m. 6 p.m. 9 p.m.	3·3 0·7
DERBY, *Mr. J. Davis, Optician.*	Oct.	52·55	1·28w.	29·72	0·350	29·370	54·1	50·9	47·8	....	65·0	32·0	56·8	44·6	50·7	11·2	33·0	....	N.E. ; E.	..	15	3·3	4·0	0·9	0·817	4·8	532	....		
	Nov.	....	....	29·73	0·296	29·434	49·0	46·4	43.1	....	62·0	28·0	51·3	39·8	45·5	11·5	34·0	....	S.W. ; S.	..	16	2·3	3·4	0·7	0·826	4·0	537	....	3 P.M.	
	Dec.	....	....	29·56	0·259	29·301	43·4	41·7	39·5	....	56·0	26·0	45·8	36·0	40·9	9·8	30·0	....	N.W. ; W.	..	18	2·9	3·0	0·4	0·872	3·6	541	....		
HIGHFIELD HOUSE, NOTTS, *Edward Joseph Lowe, Esq.*	Oct.	52·57	1·10w.	29·831	0·342	29·489	54·2	50·8	47·5	....	64·5	36·0	57·3	46·7	52·0	10·6	28·5	1·4	S.W. ; N.E.	8·3	11	2·4	3·9	1·0	0·796	4·7	531	103	Noon	Amount of Rain in December, 5 ft. above the soil was 3·8 in. and 12 ft. above the soil was 3·5 inches.
	Nov.	....	....	29·852	0·279	29·573	46·0	44·0	41·5	....	61·0	30·0	50·6	41·3	45·9	9·3	31·0	0·9	W. ; S.W.	6·9	15	2·0	3·2	0·5	0·857	3·9	541	....	6 P.M.	
	Dec.	....	....	29·663	0·265	29·398	43·9	42·3	40·1	....	56·0	29·0	46·9	39·7	43·3	7·2	27·0	2·0	S.W. ; S.	8·9	19	3·4	3·1	0·5	0·873	3·6	541	....	11 P.M.	
LIVERPOOL OBSERVATORY *John Hartnup, Esq.*	Oct.	53·25	3·0 w	29·875	0·339	29·536	54·3	50·5	47·1	....	64·6	44·0	55·9	49·1	52·5	6·8	20·6	0·8	E.S.E.	6·8	13	3·9	3·8	1·1	0·783	4·7	534	37	h. m. 1·8 P.M	
	Nov.	....	....	29·896	0·299	29·597	50·3	46·9	43 5	....	62·5	35·6	52·5	45,9	49·2	6·6	26·9	1·2	Variable.	7·0	16	2·0	3·4	0·9	0·792	4·2	539	....	.....	On Dec. 6th 10 h. P.M. the reading of the Barometer was 28·154 inches.
	Dec.	....	....	29·749	0·249	29 500	43·6	41·2	38·3	....	55·6	82 4	46·2	39·8	43·0	6·4	23·2	1·4	S.E.	7·2	18	4·8	2·9	0·6	0·835	3·5	543	....	.....	
OBSERVATORY OF STONYHURST COLLEGE, near BLACKBURN. *Rev. Alfred Weld.*	Oct.	53·51	2·8 w.	29·693	0·317	29·376	50 0	48·1	46·0	....	62·7	34·6	55·3	43·2	49·3	12·1	28·1	0·4	N.E. ; E.	..	17	3·0	3·7	0·6	0·867	4·4	534	381	9 A.M. 1 P.M.	
	Nov.	....	....	29·458	0·293	29·165	46·8	45·2	43·4	....	60·7	27·8	49·9	39·9	44·9	10·0	32·9	0·6	S.S.W. ; S.W.	8·5	19	1·3	3·4	0·5	0·876	4·0	536	....	3 P.M.	On Dec. 6th during the Evening the reading of the Barometer was 27·841 in.
	Dec.	....	....	29·370	0.239	29·131	40·4	39·1	37·5	....	52·9	23·8	43·5	33·9	38·7	9·6	29·1	0·5	N.E.	8·3	15	4·1	2·9	0·2	0·926	3·3	540	....	9 P.M.	
DURHAM, *Rev. R. A. Thompson.*	Oct.	54·46	1·34w.	29·542	0·312	29·230	47·7	46·3	44·7	....	62·0	35·5	53·2	43·0	48·1	10·2	26·5	1·8	S.S.W.	7·3	10	1·8	3·6	0·4	0·900	4·3	534	340	9 A.M.	On Dec. 6th between 6 h. and 8 h. P.M. the Barometer reading was 27·89 inches.
	Nov.	....	....	29·499	0·276	29 223	44·4	42·9	41·2	...	60·3	25·1	50·1	40·4	15·2	9·7	35·2	2·1	S.S.W.	6·1	9	1·7	3·2	0·3	0·894	3·7	538	....	9 P.M.	
	Dec.	....	....	29.369	0·234	29·135	39.8	38·5	36·6	....	54·9	30·6	43·2	36·6	39·9	6·6	24·3	2·0	S. ; S.W.	8·3	14	3·6	2·7	0·3	0·939	3·2	542	....	.....	
NEWCASTLE-UPON-TYNE, *G. Muras, Esq.*	Oct.	54·58	1.37 w.	29·767	0·355	29·412	50.4	49·4	48 5	....	62·0	36·0	54·9	44·4	49·6	10·5	26·0	....	W. ; N.E.	..	13	3·6	4·1	0·3	0·933	4·9	535	121	9 A.M.	
	Nov.	....	....	29·742	0.319	29·423	47·4	46·5	45·3	....	62·0	29·5	52·3	41·2	46·7	11·1	32·5	....	S.W.	..	7	2·9	3·7	0·3	0·932	4·4	539	....	3 P.M.	
	Dec.	....	....	29·628	0.261	29·367	42 0	40·9	39·3	....	56·5	30·5	46·5	37·4	41·9	9·1	26·0	....	S.W. ; S.E.	..	12	3·8	3·0	0·3	0·920	3·6	542	....	9 P.M.	

The barometer at Exeter was made by George Carter of Exeter; at Latimer Rectory, by Troughton & Simms; at Aylesbury by Dolland; at Stone by Whitehurst of Derby; at Highfield House by Newman; and at Stonyhurst College by Ross. The makers names of the barometers at Brighton, Chichester, Saffron Walden, Maidenstone Hill, Hartwell and Hereford have not been stated; those at the remaining stations were noted in the last Quarterly Report. The dry and wet-bulb thermometers, at Torquay were made by Bennett, 65, Cheapside; at Exeter by George Carter; at Maidenstone Hill by Watkins & Hill; at Stone by Ross; at Cardington by Bennett; at Druminargal House by Bennett; and at Stonyhurst College by Watkins & Hill. The thermometers by Bennett have been compared with Lewisham standard Instruments. The makers of those at Truro, Brighton, Chichester, Saffron Walden, Aylesbury, and Hartwell. have not been mentioned. The Instruments at the remaining stations were mentioned in the last report.

The heading of each column of the preceding table sufficiently explains itself, except that of the degree of humidity. This is expressed in the natural scale in which air at its greatest humidity (that is, when it is saturated with vapour,) is considered as unity; and air deprived of all moisture is considered as Zero, the intermediate degrees being proportional. Therefore, that which constitutes the measure of humidity of the air, is the proportion of moisture *it does* contain to what *it would* contain if saturated: thus, if air at any temperature whatever, contains vapour of half the tension which it would do if saturated, the degree is 0·5; if three-fourths, it is 0·75, and so on.

The reduction of the preceding results has been made as follows:—The first process was the application of corrections depending on the time or times of each day at which the observations had been made, to deduce from their monthly values, the true mean monthly values, for the barometer, thermometer, and each hygrometrical result. The next process was the taking of the reduced monthly mean "elastic force of vapour" from the reduced "barometer readings." The third step was the taking of the quarterly mean of these monthly values, and reducing that for the barometer to the level of the sea, and in this way the following Quarterly Table was formed.

NOTE.—In the Return from Cambridge for the Quarter ending September 30, Barometer reading in July *for* 30·202 *read* 30·051; in August, *for* 30·326 *read* 29·995: and in September, *for* 30·038 *read* 29·942.

QUARTERLY METEOROLOGICAL TABLE.

NAMES OF THE PLACES	Mean pressure of the Atmosphere of Dry Air reduced to the level of the Sea	Mean temperature of the Air	Highest reading of the Thermometer	Lowest reading of the Thermometer	Mean daily Range of Temperature	Range of the Thermometer	WIND: Mean estimated strength 0—6	WIND: General Direction	Mean amount of Cloud 0—10	RAIN: Number of days on which it fell	RAIN: Amount collected	Mean weight of Vapour in a cubic foot of Air	Mean additional weight required to saturate a cubic foot of Air	Mean degree of humidity	Mean whole amount of Water in a vertical column of Atmosphere	Mean weight of a cubic foot of Air.	Height of cistern of the Barometer above the level of the Sea.
	in.	°	°	°	°	°					in.	gr.	gr.		in.	grs.	feet
Helston	29·570	49·6	65·0	29·0	9·0	36·0	1·2	S.W.	6·8	53	17·6	4·0	0·2	0·965	5·1	535	106
Truro	.....	49·7	62·0	30·0	8·0	32.0	0·8	S.W.	7·3	61	18·6	....	....	.....	....	....	....
Torquay	29·622	49·4	64·0	31·0	7·3	33·0	2·4	S.W.	7·3	43	13·7	3·8	0·4	0·890	4·7	538	120
Exeter	29·606	46·7	67·0	25·0	10·0	42·0	0·8	Variable	7·8	58	14·3	3·7	0·3	0·887	4·5	538	140
Brighton	29·694	46·4	64·0	29·0	6·2	35·0	..	N.E.	6·9	49	..	3·6	0·2	0·947	4·4	543	60
Chichester	.....	45·9	67·0	26·0	10·9	41·0	..	.....	..	..	8·8	....	....	.....	....	....	....
Uckfield	29·780	46·6	71·0	24·0	12·6	47·0	..	S.W.	..	39	6·2	3·5	0·3	0·872	4·4	542	180
Beckington	29·689	42·9	69·0	14 0	12·7	55·0	1·4	W.	6·7	47	12·7	3·4	0·1	0·992	4·4	529	265
Royal Observatory Greenwich	29·712	47·5	73·2	24·5	11·7	48·7	..	S.S.W.	7·6	..	6·0	3·6	0·4	0·893	4·4	540	159
Maidenstone Hill, Greenwich	29·677	46·7	65·7	26·9	9·4	38·8	..	S.W.	7·6	42	6·1	3·4	0·4	·913	4·3	542	107
Lewisham	.....	46·6	69·0	24·0	11·7	45·0	..	S.W.	7·6	34	5·8	3·4	0.4	0·883	4·2	...	40
Walworth	29·527	48·0	70·0	27·0	8·9	43·0	2·9	S.W.	6·3	48	4·2	3·4	0·5	0·860	4·2	539	32
Latimer Rectory	29·641	44·2	70·0	23·0	13·2	47·0	..	Variable	..	53	8·8	....	....	.....	....	....	300
Aylesbury	29·624	45·2	68·0	27·0	12·2	41·0	0·5	S.	7·4	39	8·8	3·4	0·3	0·923	4·4	539	280
Hartwell House	29·575	45·3	72·0	21·0	15 1	51·0	1·2	S.W.	7·1	..	7·0	3·4	0·3	0·897	4·4	539	300
Stone Observatory	.....	44·6	68·5	23·0	11·5	45·5	1·3	S.W.	7·4	43	8·0	3·5	0·2	0·941	4·4	537	....
Pool Cottage, Hereford	.....	45·6	..	..	..	..	..	S.S.W.	..	38	13·8	....	....	.....	....	....	....
Cardington	.....	44·3	66·0	25·0	11·2	41·0	..	S.W.	6·8	36	6·3	3·1	0·4	0·896	4·2	539	....
Thwaite	.....	..	72·0	29·0	..	43·0	0·6	S.W.	..	30	6·7	....	....	.....	....	....	200
Cambridge Observatory	29·705	45·6	70·9	26·2	13·3	44·7	1·0	Calm	7·7	40	5·4	3·4	0·3	0·904	4·2	541	88
Saffron Walden	29·712	46·3	69·0	30·0	9·7	39·0	2·6	S.W.	5·3	40	6·0	3·0	0·8	0·804	3·9	538	....
Norwich	29·670	45·0	64·0	31·0	8·0	33·0	..	Variable	..	40	6·4	3·4	0·4	0·897	4·0	541	39
Derby	.....	45·2	65·0	26·0	10·8	39·0	..	Variable	..	49	8·5	3·3	0·4	0·898	4·0	535	....
Highfield House	29·608	46·6	64·5	29 0	9·0	35·5	1·4	S.W.	7·4	45	7·8	3·2	0·6	0·863	4·0	538	103
Liverpool Observatory	29·575	47·7	64·6	32·4	6·6	32·2	1·1	Variable	7·1	47	10·7	3·2	0·7	0·855	3·9	539	37
Stonyhurst Observatory	29·689	43·8	62·7	23·8	10·6	38·9	0·5	Variable	..	41	11·4	3·3	0·2	0·916	3·8	537	381
Durham	29·589	43·9	62·0	25·1	8·5	36·9	2·0	S.S.W.	7·2	33	7·1	3·2	0·3	0·944	3·9	538	340
Newcastle	29·536	45·6	62·0	29·5	10·2	32·5	..	Variable	..	32	10·3	3·5	0·2	0·968	4·3	539	121
Druminargal House, Scarva, Ireland	.....	44·5	64·0	23·3	10·2	40·7	1·4	S.W.	6·9	50	12·4	3.4	0·2	0·943	4·1	....	....
Number of Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

From the numbers in the first column it appears that the volume of dry air was very nearly the same at all parts of the country. The mean of all the results in the first column, is 29·640 inches, and this may be considered as the pressure of dry air for England during the Quarter ending December 31, 1847.

From the numbers in the second column, we find for the Quarter ending December 31, 1847, that the mean temperature of the air for the counties of Cornwall and Devonshire was 48°9, and for the remaining counties, excepting those N. of latitude 54°, was 45°7, and that the mean temperature of Durham and Newcastle was 44°8.

The average daily range of the temperature of the air in Cornwall and Devonshire was 8°6; at Brighton and Liverpool was 6°4; and the mean value for all other places was 10°5. The greatest mean daily ranges took place at Hartwell, Cambridge, Latimer Rectory, Uckfield, &c., and the least occurred at Brighton, Liverpool, Torquay, Truro, Norwich, &c.

The highest reading during the quarter was at Greenwich, which was 73°2, and the lowest was at Beckington, which was 14°. The extreme range of temperature in England, during the quarter, was therefore 59°2.

The average quarterly range of the Thermometer readings in Cornwall and Devonshire was 35°7; at Brighton and Liverpool was 33°6; at those places situated between the latitudes of 51° and 52°¼ was 44°7; and between the latitudes of 52°¼ and 55° was 36°. The ranges at those places situated at a high elevation, in all cases, are much greater than at those places situated in the same parallel of latitude, but at a lower elevation.

The mean direction of the wind for all places was S.W., except at Brighton, where it was N.E.

From the numbers in the ninth column it appears that the distribution of cloud has been nearly the same at all parts of the country, and such as to cover three-fourths of the whole sky.

The fall of rain has been the largest in Cornwall and Devonshire, the average amount for the quarter was 16 inches, and it has fallen on a greater number of days in those counties than in any others, the average number is 54, but this number was exceeded by 7 at Truro. At Torquay the number was 43 only. At Walworth the fall seems to have been the least in amount, but this value is not confirmed by those at neighbouring places. The next in order is Cambridge, Lewisham, Saffron Waldon, Greenwich, Uckfield, Cardington and Norwich. (The construction of the several gauges are different, and many of them have not been tested either by weighing the collected water, or by accurately measuring the vessels in which it is received. At Walworth, Crosley's self-registering gauge is used, which construction of guage, after being in use a short time, does not truly register the fall, and should not be depended upon solely in any case).

Columns 12 to 16 contain the mean hygrometrical results, and they are nearly identical at most places. At Beckington, however, the air seems to have been nearly in a state of saturation during these three months, if the instruments be good by which the observations were made, they have not, however, been compared with standards. The degree of humidity in the Vale of Aylesbury is greater than that due to its latitude, and this seems to be decided, as the results at three different stations agree very well together.

The mean weight of vapour in a cubic foot of air for England (excepting Cornwall and Devonshire) in the quarter ending Dec. 31, 1847, was 3·4 grains
The mean additional weight required to saturate a cubic foot of air ..... do was 0·4 grains
The mean degree of humidity ..... do was 0·903
The mean amount of vapour mixed with the air would have produced water, if all had been precipitated at one time on the surface of the earth, to the depth of ..... do was 4·2 inches
The mean weight of air under its average heat, humidity and pressure ..... do was 538 grains

And those values for Cornwall and Devonshire were 3·8 grains; 0·3 grain; 0·914; 4·8 inches and 537 grains.

The results from the station in Ireland, depending on the temperature of the air, the direction and strength of the wind, and the amount of clouds, agree with those in England at the same latitude; but the results which depend on humidity of the air, and on the amount of rain, exhibit an excess over those in England.

N.B.—Skeleton Forms, drawn up by Mr. Glaisher, for the registration of Meteorological Observations twice a day, are on sale at Mr. J. Clark's, Stationer 13, Moorgate-street, near the Bank, London.

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ENGLAND.

CAUSES OF THE 420,977 DEATHS REGISTERED IN THE YEAR 1847.

THE TABLE SHOWS THE DISEASES FATAL TO MALES AND FEMALES AT 24 PERIODS OF LIFE: THUS, PHTHISIS WAS FATAL AT THE AGE OF 20 AND UNDER 25 TO 3,521 MALES, AND 3,899 FEMALES, AT THE AGE OF 25 AND UNDER 30 TO 2,983 MALES, AND 3,683 FEMALES.

| DISEASES. | All Ages | | Under 1 year | | 1— | | 2— | | 3— | | 4— | | Under 5 years | | 5— | | 10— | | 15— | | 20— | | 25— | | 30— | | 35— | | 40— | | 45— | | 50— | | 55— | | 60— | | 65— | | 70— | | 75— | | 80— | | 85— | | 90— | | 95 & upds. | | ? | | DISEASES. |
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